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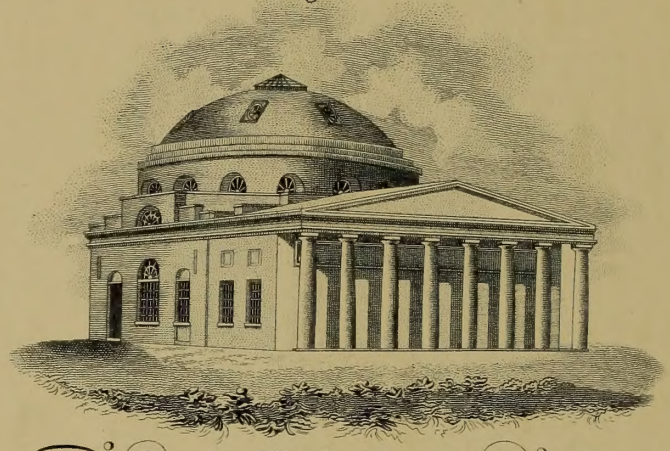

University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 2013-1837. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained numerous errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were: Richard J. Peebles, Historical Library and Preservation Officer; Maria Allegra Perkins, Metadata Management Librarian; Angela Cockerham-Lee and Hatting-Henry, Resources Developing Search Details; Alma Salazar and Megan Kraft, Service Division.

These dissertations were digitized in 2011-2012 and are available at the UM Digital Archive (archive.lib.umaryland.edu) and the Internet Archive (www.archive.org).

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(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1886 (a)

Author	Title	Notes
Feeser, Hezron R.	Typhoid Fever	
Lewis, George William	Simple and Pernicious Intermittent Fevers	(no title page)
Korner, Alexander H.	Embryology	
Kirby, William A.	Digestion	(no title page)
Black, William C.	Pneumonia	(no title page)
Christian, Charles C.	Dysentery	(no title page)
Pfaltzgraff, Samuel K.	Cholera Asiatica	
Kloeber, John S.	Typhoid Fever	
Fishel, Henry Warren	Myopia of School Children	
Clymer, Frank L.	Bronchitis	(right margin bound)
Wyse, William P. E.	Acute Bronchitis	
Best, J. Janney	Scarlatina	
Harris, James Edwin	Diseases of the Maxillary Sinus	(noteworthy calligraphy on title page)
Braymer, Frank H.	Lobar Pneumonia	

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1851-1892; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title	Notes
Coulbourn, Joseph T.	Clinical Reports	(no title page)
Smith, Nathan R.	Malarial Fever	

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1851-1892; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1886 (a)

Feeser, ~~H.~~ Hezron R.	Typhoid Fever	40p. (partially faded ink)
Lewis, ~~G.~~ ~~Wm.~~ George William	Simple and Pernicious Intermittent Fevers[1]	29p.
Korner, A. Alexander H.	Embryology	30p. (partially faded ink)
Kirby, ~~W.~~ William A.	Digestion[2]	28p. (partially faded ink)
Black, ~~W.~~ William C.	Pneumonia[3]	28p. (partially faded ink)
Christian, ~~C.~~ Charles C.	Dysentery[4]	23p.
Pfaltzgraff, ~~S.~~ Samuel K.	Cholera Asiatica	45p. (partially faded ink)
Kloeber, J. John S.	Typhoid Fever	40p. (partially faded ink)
Fishel, ~~H.~~ Henry ~~W.~~ Warren	Myopia of School Children	34p. (partially faded ink)
Clymer, ~~F.~~ Frank L.	Bronchitis[5]	20p.
Wyse, ~~W.~~ William P. E.	Acute Bronchitis	17p.
Best, J. ~~J.~~ Janney	Scarlatina	34p.
Harris, ~~J.~~ James ~~E.~~ Edwin	Diseases of the Maxillary Sinus[6]	20p.
Braymer, F. Frank H.	Lobar Pneumonia	56p. (partially faded ink)
Coulbourn, ~~J.~~ Joseph ~~T.~~ T.	Clinical Reports[7]	21p. (partially faded ink)
Smith, Nathan R.	Malarial Fever	29p.

1,2,3,4 - No title page

5 - Bound on right margin

6 - Noteworthy color title calligraphy.

7 - No title page

251
75N
399
257

Typhoid Fever

By S. R. Geeser

Baltimore Feb. 10. 1886

72

1Mb
19008

Dengue or Fever.

Dengue is a mild acute febrile disease, characterized by a peculiar eruption, by intense muscular pains, by lassitude, by epithelial desquamation, by swelling of the associated mucous glands, by another attack by a second, and by a tendency to stubborn convalescence.

Causation: This disease is widespread throughout portions of the globe, prevailing in limited or circumscribed districts. It occurs as a disease allied to malaria fever, most frequent in lowlands. Children as well as adults are liable to be attacked but it is supposed to be infrequent in infancy, very rarely occurring before two years of age. It is comparatively

[illegible] 50 years, [illegible]
exported even beyond sixty years.
The most frequent between fifty
and thirty. Little cases are found
so early affected by this disease.
When the disease commences
and lasts longer it more often
leads to death than does any other
[illegible]
Syphilis is a most terrible con-
tagious disease that is not brought
forward from some [illegible]
affected but unknowingly. The person
[illegible] [illegible]
[illegible] [illegible] to the
[illegible] person is [illegible] and
exported from the body through
the [illegible] [illegible] after which
they are [illegible] through [illegible]

water or through the air, most likely
by the fungus [illegible] and may
hold hypothesis are in themselves
selves not capable of producing it
but we don't know it [illegible]
when the spores germinate [illegible]
The poison of hydrophobia is extremely
volatile and preserves its activity
a long time, so that should by
fluid come in a gaseous form
and then disappear for a long time
under favorable circumstances may come with
over the whole [illegible] of a new case
It is [illegible] that
there must be [illegible] some [illegible]
in the [illegible] to [illegible]
more growth as long as this poi
son is fresh [illegible] no
[illegible] [illegible] [illegible] fur-

[illegible] modify sufficiently
[illegible] "
[illegible] commonly.
The period of incubation is rarely
[illegible] less than 5 days
[illegible] 8 days. I have thought the
[illegible] but rarely eight days.
Pathological anatomy.—The char-
acteristic inflammatory processes
which take place in the lymphatic
structures are in the lymphatics
of the intestines, the mesenteric
glands and in the spleen.
The first effect, which in the intes-
tines is in the mucous membrane
which becomes very thickened
and in the end has undergone
[illegible] leaving ulcers
covered with mucus. At an early

[illegible] half the [illegible]
[illegible] the [illegible]
[illegible] and [illegible]
[illegible] the [illegible]
the [illegible] of the [illegible]
[illegible] decreases, except in the
[illegible] to the [illegible] where
it becomes [illegible] [illegible]
ground.

The [illegible] are often the [illegible]
portion of the large [illegible] [illegible]
[illegible] in some cases, but is gen-
erally limited to the [illegible] and
[illegible]. These [illegible] are always
[illegible] affected and in no [illegible]
[illegible] of the [illegible] but the
[illegible] [illegible]. The [illegible]
of the [illegible] is due to hyperplasia

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

The enlargement of the glands was then found out above the surface of the testicles, at this stage the glands are found to be grayish white or light red color and of a soft brain like consistence, hence the term medullary infiltration which is often given to this stage of the process.

This brings us to the second stage of the disease known as death or destruction of the newly formed tissue

this may be [illegible] either in a
labor or elsewhere. It is generally
not on the same subject some of
the glands undergo resolution rather
than abscess. In resolution the
flocculi and villous are doubtless
and without suppuration. In
healthy constitutions some of the
villi undergo fatty degeneration and
are absorbed. This process is more
common in children than in
adults, which goes to explain the
fact that so many children have
intestinal disorders in children.
In some of the glands the medi-
cinal follicles rupture and
charge their contents into
adjacent tissue, thus forming a
ulceration. It this appears as

The secretion which takes place

from the lymphatic glands is in the formation of a slough, which is then thrown off and the ulcerated lesion, by which it was formed, then rapidly takes place on the healthy work.

The foods of this nature and secretion may vary the whole part of the gland, the sloughing usually does not extend beyond the limits of the glands the peripheral portion is thus undergoing resolution from the time of its origin, is compared with that of the original gland, thus requiring from the patient to run out with their long life in the direction of the gut

and the secretory fluid the sal-
ivary glands will be somewhat
altered in shape.
When the degree of congestion and
size of the gland is great, the whole
may extend slightly beyond the
contour of the gland. The stroma
is usually of a greenish yellow color
due to the presence of biliary products.
They sometimes present a new begin-
ning appearance which results from the
sloughing of small capillaries.
The sloughing and ulceration
take place first at the ileo-cecal valve
and from here up to the upper
begin. The process will be seen.
The ulcer is formed
of the submucous or muscular coat
of the intestines, but sometimes

[illegible] so that it may be
formed by the serous coat, when
there will be great danger of per-
foration in typhoid fever. The flor
is generally smooth and often
presents to view the transverse
fibres of the muscular coat. The
edge of the ulcer is generally thin
and undermined.

The patches often contract at their
terminations of their long axis, par-
ticularly in the long axis of the intes-
tine, thus allowing an extra-
ordinary length.

These changes are usually followed
by that pigmentation or stain
this takes place by the resolution
of the fibrinous infiltration and
the extravasation upon the flor

of the other [illegible] tissue covering the union of the [illegible] with that of the [illegible], the [illegible] results in an [illegible] covering. The proper shape of the [illegible] can never be [illegible].

Forwards [illegible] is slightly depressed, and [illegible] the surrounding tissue, of a [illegible] color and not infrequently [illegible].

[illegible] in the [illegible] of the [illegible] dangerous [illegible].

[illegible] consulting [illegible] [illegible], and [illegible] upon [illegible] the result from which there is [illegible] greater danger of [illegible] than from the [illegible]

6. [illegible] of the [illegible]

[illegible] the thickness of the ulcer from the [illegible] of the gut by [illegible] the contact of two or [illegible] surfaces of [illegible]. It may occur from one or more ulcers, and is the most frequent from the [illegible] to the fifth week.

The mesenteric glands especially those in close relation to the ulcerated Peyer's patches become enlarged, soft and more vascular. These enlargements are due to cellular infiltration. They usually undergo a process of resolution. Sometimes however cellular remains to bind, and a slow cheesy transformation is effected. This sometimes becomes infiltrated with calcareous salts leaving then the appearance of

death from the liver, brought
about by a long time
after the attacked by typhoid
fever.
The spleen often attains two or three
times its normal size, of a dark
red color, soft or even diffluent, so
that it can not be cut by the fingers
nails. As it gets
enlarged the hyperaemia of this
organ diminishes, cases have
been reported where the capsule
of the spleen ruptured causing
sudden death or peritonitis.
And as result of typhoid is what is
known as pernicious anemia degeneration
of organs and perhaps degeneration
of muscle. The lymphatic glands
general are in sort of fatty degeneration

[illegible]

[illegible] suffering by the pressure the consistence of the organ is lost. Its color is somewhat changed to a bluish red, and the blood in the small vessels is [illegible], generally the right lobe is more affected than the left. Nevertheless the organ remains perfectly normal.

In the kidneys a similar process is displayed. The epithelium becomes granular and cloudy, the nuclei disappear, and at last the cells break down into granular fragments. Its firmness and color is also effected. The liver is usually further [illegible] the kidneys in proportion to the degree of high temperature, and

[illegible]

[illegible] the [illegible] of the [illegible] [illegible] the [illegible] [illegible] [illegible]

[illegible] of [illegible] the [illegible]
[illegible] [illegible]
[illegible] [illegible] general [illegible]
[illegible] of the body. The [illegible]
[illegible] due to the [illegible] [illegible]
[illegible] [illegible] and [illegible] [illegible]
[illegible] [illegible] temperatures.
The muscles of the tongue are very [illegible]
to undergo the change, hence the
[illegible] of the tongue [illegible]
[illegible].

In nearly every case of typhoid
fever the lungs are affected. In cor-
[illegible] cases we have probably
congestion which in some cases
[illegible] to hypostatic pneumonia.
Sometimes the lungs are affected
with ulceration, but the most [illegible]
[illegible] lesions are those of the [illegible]

[illegible]

[illegible] lasting [illegible]
[illegible] guilt [illegible]
[illegible] history. — [illegible]
[illegible] [illegible] [illegible]
[illegible] feeling [illegible] [illegible]
[illegible] [illegible] [illegible] weeks, [illegible]
one or two weeks, sometimes it [illegible]
[illegible] [illegible]. During this period the patient is [illegible]
and indisposed to activity, says he feels tired or tired all over. Has very little appetite, complains of slight headache, [illegible] uneasiness or uneasiness referred mostly to the spinal region, sometimes followed by [illegible] sensation and sometimes not. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]

[illegible] of [illegible] general [illegible]
[illegible] not [illegible] that of [illegible]
[illegible] of [illegible] [illegible]. The
[illegible] [illegible] [illegible] accelerated
the patient [illegible] [illegible] to [illegible]
[illegible] [illegible] [illegible] [illegible] anything
by [illegible] fever [illegible] which [illegible]
[illegible] [illegible] the patient to take
to bed, from which time we will
consider the disease established.
The fever [illegible] [illegible] great
[illegible] [illegible] [illegible] and does
not entirely cease in the morning
and has [illegible] [illegible]
the difference between the evening
and morning temperatures up
to the time of convalescence [illegible]
from half a [illegible] to a degree and

Resp. The daily average Temperature increases for the first week, when in ordinary cases (uncomplicated) it reaches about 103 degrees.

Maximum reached between 6 and 7 P.M. and lowest between 8 and 9 in the morning.

Temperature is indicative of great power of the disease, a grave complication, it rises to higher than that of the 4th day. When it reaches 106° two out of three will die, and when it reaches 107° recovery is rare exception.

The morning Temperature reaches 106° death is near at hand. A sudden considerable rise in temperature during the progress of the disease, generally indicates some intercurrent compli-

and is which is the best sign of

a little considerable fall, other

signs not so favorable convalescence

is an unfavorable prognosis, often

indicating a relapse performed

Convalescence is pronounced by a

gradual decline of the temperature.

Delirium is more frequently present

throughout, generally begins about

the second week, sometimes not till

the third or fourth week, it is often

worse at night, some patients

are entirely free during the day

suffering only during the night

it is generally of a quiet character

any kind, sometimes of the furious

active form. It is no evidence of

complete inflammation, since

examination after death seldom

Tuberculosis is a fatal disease. Apparently it results from a weak state of the nervous system, the patient being, as a drowning like state has a certain proportion of cases consumptive developed, generally in the later stages of the disease, and from this unfavorable result is hard to predict. The patient dying from apnoea, it is often found that by a pecking respiration.

The sputum bacillus and, in which phthisis is exhibited by some showing that there is pronounced disturbance of the nervous system. The special senses are somewhat impaired especially that of hearing deafness being manifest.

in both eyes. A disposition to drowsiness and sleep is very common, sometimes the general sensibility is so blunted that it will not act upon his face.

Paralysis of the sphincters is more often due to blunted perception than to true paralysis.

The respiration during the first week is slightly accelerated but later, even tho' it is delayed, it becomes more frequent but still not in a marked degree, unless in exceptional cases when there is an abundant mucous collection in the smaller bronchial tubes. If the hacking cough is present in a large proportion of cases, but not as a pronounced

symptoms, unless it be a
pulmonary complication. exist
the before mentioned pneumonia
this exists as a complication
and may be suspected by a
retarded breathing, and prom-
inent cough, but to prove its
existence we resort to physical
signs, viz: dulness on percussion,
subcrepitant rales, and weak
respiratory murmur. This com-
plication always adds to the
danger of the disease, but is
not a sure prelude to recovery.
I have also mentioned epistax-
is occurring in the prodromal
period as a frequent diagnostic
symptom, it also not infrequently
occurs in the later stage, generally

The pathology is not so clear to some degree, but bearing off some it requires mechanical means for its suspension.

The pulse is always more or less accelerated and generally increases in frequency with the severity of the disease.

In most frequent during an exacerbation, the volume of the pulse shows increased action, but not increased power of the ventricular systole is soft, quick and fluttering.

The bowels are often frozen in typhoid fever which may be prevented by the administration of sometimes even to the last.

Generally speaking there is always

[illegible] frequency of the pulse exceeds 120 beats per minute, [illegible] is seen [illegible] during the period of fever and during the first week, but usually ceases during the second week.

The light spots generally are less [illegible] and [illegible] present a [illegible] appearance [illegible] in the early stage.

Jaundice is the general rule, but sometimes cases occur in which the patients retain their [illegible] throughout the disease.

There is no pain [illegible] in all cases, and is manifest only when the senses become blunted or over-ten is taken with [illegible] other provided.

The tongue is usually enlarged
and of a reddish brown and
sometimes an distinct furrow
of the middle coat is simply
furred or frosted, when the coat
ing is thrown off the tongue
presents a reddish color and
tender, especially along the
borders and tip, with enlarged
papillae. Sometimes if the
tongue dry and hard, this is
especially the case in coming out
the patient putting tongue through
mouth.

Inflammation of the parotid
gland is rare in cases from a
without rose.

Diarrhoea not already present
usually appears in the second week.

the stools are highly destructive of
the tissues, of an alkaline reac-
tion, of a yellowish green color,
generally more or less fluid, som-
times of a coffee ground appearance
of an offensive odor, and if fur-
nished the microscopic shreds may
be discovered from the layers beneath.
The intestinal ulcers pave the way
for internal hemorrhages, and is
often brought on by sudden and
considerable fall of temperature.
It may be slight or profuse, if
very great it may be the main
fatal cause of death. It comes on
about one or two p.m. The cor-
stoppage of blood flowing externally
is not a true sign that the hem-
orrhage has ceased, it may in

from exhibitions, but within the
[illegible] go [illegible]
[illegible] exist.

[illegible]
[illegible] case, but as before referred
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] Philosophis, although this
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]

with the first bowel is the most
is always more favorable from the last
two causes peritonitis from perfor-
ation being most always fatal.
Tympanites, iliac tenderness and
gurgling form a group of symptoms
not so marked in the early days
of typhoid fever, the first is in-
variably present, and sometimes caus-
es great enlargement of the abdo-
men, in addition to the presence of
intestinal gas.
Iliac tenderness, in the right iliac
region, above Poupart's ligament,
pressure should always be made
easy and careful; when the cases
are very much bloated, considera-
ble pressure may be required to el-
icit pain.

Gurgling or splashing sounds due to the movement of fluid or fluid and gas in the intestinal canal, generally about the ileo cecal valve. This cannot be regarded as a dangerous sign since it often occurs in other diseases.

Rose colored spots appear upon the skin generally between the 6th and 14th days, this eruption is not always present and may be absent in fatal as well as in mild cases.

The eruption consists of isolated papules, generally limited to the body of a round or oval form, from one to two lines in diameter, they but do appear in crops, their elevation can easily be perceived by passing the hand over the surface

They disappear [illegible] by [illegible] (present) [illegible] [illegible] [illegible], in some cases they are [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] about three days, they should be sought for on the surface of the abdomen, breast and [illegible], are not perceptible after death.

The duration of typhoid fever is variable, the termination in convalescence like the development is gradual. In most cases the [illegible] becomes extremely [illegible] after recovery. The patient attaining a greater [illegible] than ever before. In some [illegible] the mental faculties are enfeebled for a considerable time.

Diagnosis. At the beginning it is often difficult to say in what form of disease the patient is labouring.

The points mentioned in the clinical history that were distinctive of typhoid were, disproportionate development, daily increase of temperature for the first week with evening exacerbations, diarrhoea without blood stools, epistaxis, rose-colored stools, and the abdominal symptoms, ileo-cecal tenderness, tympanites and gurgling.

From typhus, the prodromic period was short, headache as in typhoid, but delirium and prostration were pronounced in typhus. In typhoid we have an

[illegible] [illegible] [illegible] [illegible] [illegible]
diseases which are absent in typhoid.
Usually the location of typhoid is more
[illegible] but is not directly in regions
which typhoid is commonly now
[illegible] and lastly the symptoms
of the two diseases have each their
own peculiarities.
From acute miliary Tuberculosis,
in miliary tuberculosis we have
fine subcrepitant rales in both
lungs; in typhoid when presence
of a coarse kind in tuber-
culosis you will have rapid de-
velopment of distress in the up-
per of the lung. In typhoid when
pneumonia is present, the dull-
ness will be at the base of the
lung. [illegible] [illegible] [illegible]

[illegible] the [illegible] [illegible]
rapid development of fever to 107
[illegible] in typhoid [illegible] [illegible] more
is gradual, in typhoid you
will have some enlargement of
the spleen. In Tuberculosis we have
a tuberculous deposit in the choi-
roid of the eye which is not seen
in typhoid fever, and is ascertained
by the ophthalmoscope.
In the early part of the disease it
might be confounded with, or lobar
[illegible] in children and
pneumonia, but generally at the
[illegible] is [illegible] there remains
no doubt, or at least should
not.

)

CHORDS: - Pneumonia by raised

[illegible]

[illegible] of [illegible]

[illegible] prognosis in general is more

favorable [illegible] after forty

[illegible]

[illegible] 4.

prognosis [illegible]

[illegible] temperature is an in-

dication of pneumonia. i.e. rapid-

ly falling temperature [illegible]

[illegible]

[illegible]

[illegible]

delirium, & fever. Apparently the
accustomed the endurance of it
which do not bear the disease so
well. If remission is attained dur-
ing pregnancy it generally pro-
duces abortion, but is not necessar-
ily fatal to the mother.
In general a favorable prognosis may be entertained in uncom-
plicated cases so long as the
temperature does not exceed 105°
or 104° the pulse not very frequent
nor feeble. The delirium is not
great and the eruption soon
after appears.
Treatment — no disease for a
favorable issue depends so much
on judicious treatment as does
typhoid fever. It may be guaran-

[illegible]

[illegible] for the proper management of the disease [illegible]

[illegible]

[illegible]

[

[illegible] is often effective in

[illegible] diluted hydro-
chloric, [illegible] inhalations for
inflammation, [illegible] sent by a repi-
[illegible], or opium combined with
sulphate of copper, turpentine is
often useful especially if the tongue
presents a glazed appearance, best
given in the form of [illegible].

Tympanites often embarrasses res-
piration by diminishing the
lungs space, apply turpentine
stupes, to be used [illegible].

Delirium often calls for treatment
(want of true sleep), in some cases
[illegible] controls it admirably, best
use morphia in small doses, the
bromides often act well.

Wines [illegible] fulfil this purpose

Diffusible stimulants to support the heart's action. Some should not be used when the heart will be in its action, chloral has a very strong sleep producing power.

Intestinal disorder. where this common opium will fulfill all purposes, but to relieve pain, and quiet the bowels, we generally bring about its anodyne action as quick as possible.

Hemorrhage from the bowels, here turpentine is of the greatest value, opium with gallic or tannic acid is often very effective. Application of cold to the right iliac region, ergotine hypodermically often acts most efficaciously.

Stimulants:- failure of the heart requires stimulants, but otherwise

should not be given except to those
addicted to them and who require
a regulated daily amount.
Bed sores are apt to occur in this dis-
ease generally upon the nates, sacrum
and scapulæ first indicated by red-
ness of the part. Keep the part wash-
ed once per day with spirits of
camphor, and avoid mechanical
pressure from the part, if ulceration
has taken place wash with solution
of carbolic acid, or dress with e-
qual parts of copaiba and cas-
tor oil, a large quest poultice is
an excellent application, especial-
ly if more or less weight is sup-
ported by the part.
Complications often require spe-
cial treatment.

Removal and disinfection of the excretions should be insured at once. If constipation occurs, best relieved by an aperient, if vomiting is severe best use calomel.

Hygienic measures are of the greatest importance, temperature of room about 55° to 60°, expel and air, especially woolen should be taken from room, room should be kept very quiet. Diet should be thin gruel & beef tea but must be given in moderate quantity, and at suitable intervals, may be given alternately with weak mutton, beef or chicken broth. Air should always be freely admitted into the room.

Simple and pernicious Intermittent fevers. I shall first consider the simple and subsequently the pernicious form of the disease.
Simple Intermittent fever is characterized by the occurrence of febrile paroxysms in regular succession, and the absence of febrile movement between the paroxysms. The intermission is the distinctive feature of this form of fever. This fever is popularly known as chill and fever. Bronzing of the Brain, Spleen and Liver with enlargement of the two latter organs are anatomical characters of this form of fever. I shall now

Consider the paroxysms and subsequently the intermission. In the majority of cases the attack is sudden. However in a certain proportion of cases there are premonitions for a possible period. They consist of pain in the head, yawning, indisposition to exertion, loss of appetite and general malaise. The paroxysms consist of three distinct stages, namely the cold the hot and the sweating stages. Cold stage — This stage commences with a feeling of chilliness beginning in the loins and thence extending over the back and limbs. The chill is more or less intense, in some cases consisting only of a slight sensation of coldness

and in others it is extremely severe.
You may or may not have muscular
tremor or rigor accompanying the chills
During the chill you will have bristl-
ing of the hairs over the body which
gives the appearance of goose skin
Notwithstanding the coldness which the
patient experiences during the paroxysm
the thermometer placed in the rectum
will show a markedly increase in the
temperature of the body. This increase
of temperature begins prior to the paroxysm:
During the rigor the teeth chatter and the
movements of the body and limbs are suf-
ficient to shake the bed with consider-
able violence. During this stage the patient
sighs, the pulse is accelerated and feeble

the countenance has an anxious expression. In fact the general appearance is that of a person who has been exposed to intense cold. The circulation is sometimes suspended in the fingers for a time; they are waxy in appearance and devoid of sensibility and if wounded bleed less than usual. The patient has mental irritability and a sense of oppression referable to the precordial region, pain in the head and palpitation. The duration of this stage is from half to three quarters of an hour. The transition to the next stage is gradual, flushing of heat are felt, the cold seems as it were melts away, febrile movement is developed and the cold stage is thus ended. The cold stage is not infrequent

usually vomiting. In some cases intense nervousness has been observed to take the place of the cold stage. Gastralgia or gastric irritability, drowsiness or stupor and a condition resembling hysterical coma have also been observed by some writers to take the place of this stage. In young children convulsions are not infrequent in this stage. In consequence of a diminished supply of blood to the periphery of the organism we have congestion of internal organs. The congestion incident to this stage does not stand in a causative relation to the other stages as is proven by the fact that this stage is not infrequently wanting and in these cases the other stages are not less marked than when

this stage occurs Hot stage — This stage is characterized by more or less pyrexia. The skin becomes hot, the pulse is accelerated and full or bounding, the face is flushed, the cephalalgia continues, but the pain in the limbs and precordial oppression disappear. The temperature usually reaches 105 or 106 F. Thirst is a prominent symptom. The duration of this stage is from three to eight hours. During this stage the spasm of the vessels that existed during the cold stage is relaxed and the vessels are filled with blood and abundantly dilated. Sweating stage — Perspiration first appears on the face and thence on the trunk and extremities. The pyrexia abates and at length

disappears. The heat of the surface, Ophthalmalgia, thirst and others decrease. The thermometer shows a rapid fall of heat to the normal standard. In some cases the sweating is profuse and in others only slight. The average duration of this stage is three or four hours. This stage is evidence that the pyrexia is about to end. During and succeeding the paroxysm urea, uric acid and the chlorides in the urine are increased. The urine not infrequently being albuminous and occasionally there is hæmaturia. The intermission is the space of time between two successive paroxysms while the interval being the period from the beginning of

one paroxysm to the beginning of an other. The duration of the interval is the basis of a division into varieties commonly known as the different types of the disease. There are three types of intermittent fever namely the quotidian the tertian and the quartan type. In the quotidian type the paroxysms occur every twenty four hours. In the tertian the interval is about forty eight hours. In the quartan type the interval is about seventy two hours.
The quotidian and tertian types are by far the most frequent. The quartan type being comparatively rare. Cases are observed in which one of the simple types is duplicated; that is, two sets of

paroxysms of the same type co-exist. Thus one compound type is called a double quotidian, two paroxysms occurring daily. The other is a double tertian. In a double tertian a paroxysm occurs every, and on successive days they take place at different hours and may differ in various ways; whereas on alternate days they take place ~~[illegible]~~ at the same hour, and correspond in other respects. We also have a double quartan. These compound types except the double tertian are extremely rare. The paroxysms of the quotidian and tertian types generally occur before noon whereas the quartan type paroxysms occur after noon. They are said to be retarding when each successive paroxysm is in

like manner delayed. This variation in the time of recurrence is evidence that the disease is about to end. During the intermission the patient complains of more or less debility; the appetite and digestion are good, and there is no apparent disorder of the functions. Whereas in other cases there is marked prostration. The enlargement of the spleen "ague cake" is very often a complication in districts where it is prevalent. It occurs in cases that have been of short duration, and by no means occurs in all cases in which the disease has been chronic or long standing. Anaemia is especially incident to this disease if it has been of considerable duration

The pallor of the face in protracted cases of this disease is often associated with more or less edema. These characters denote what is called malarial cachexia. Anasarca with effusion into the serous cavities, is some time incident to this disease, and does not necessarily denote either a renal or cardiac affection. The duration of the disease is indefinite. It not infrequently ends spontaneously after a few paroxysms; but in many cases it continues for weeks if not arrested by curative means. Its indefiniteness of duration is a striking point of difference as contrasted with the continued fevers. Its liability to relapses is an other striking point of difference. Subsequent attacks occur

in a large majority of cases. In a certain proportion of cases successive attacks occur regularly after a certain period, showing that in these cases the relapses take place in accordance with an intrinsic tendency, irrespective of external causes. Intermittent fever may exist in combination with bronchitis, pneumonitis and dysentery. It is said to be masked when such is the case. The association may render the disease irregular, and interfere with the free development of the paroxysms. Causation — The cause of this disease is a special morbid agent, commonly known as Malaria. The production of the special cause was attributed to vegetable decomposition in marshy

localities and called Marsh miasma in 1717 by Lancisi in Italian localities. This doctrine and the name have since been generally accepted. It is fairly proven that something more than mere vegetable decomposition is requisite for its production by the fact that in some localities where the decomposition marsh and does take place abundantly and the disease never occurs. Observation shows that it is produced especially in marshy localities, but its production is not confined to such situations. The production of the special cause requires a temperature above 60° Fahr. It is more abundant in malarial districts when a dry season follows a wet period. Its production

is increased after turning up the soil. Highly malarial districts may become free from it by cultivation of the soil for several years. The specific gravity of malaria keeps it near the surface of the earth; as is proven by the fact that persons sleeping in an upstory may entirely escape it; while those who sleep near the level of the earth contract the disease. The special cause must involve a contagium, therefore it belongs to those distinguished miasmatic. The incubation period of this disease is variable: it may be a few weeks or it may be months or even years before its morbid effects are manifested. Auxiliary causes such as exposure to cold over

exertion, excesses in eating and drinking and the like seem to be necessary in some cases to make the disease manifest itself. It shows no preference to either sex, and it affects all ages. Diagnosis— The diagnosis in well marked cases offers no difficulty. To obtain the type we must note the duration of the interval and a comparison of the paroxysms. We know in Pulmonary Phthisis the occurrence of febrile paroxysms resembling those of Intermittent fever; this should be remembered in making our diagnosis. The treatment appropriate to intermittent fever will sometimes arrest the paroxysms connected with Phthisis.

Prognosis— Simple Intermittent fever

as regards immediate danger is not a grave affection. An Intermittent fever at first devoid of danger may become pernicious. It has been claimed or supposed by some writers that this disease exerts a protective influence against the development of pulmonary Phthisis; whereas on the other hand some claim that it rather favors the development of pulmonary Phthisis than protects against it. My teaching and belief is with the latter class.

Treatment—For the cure of intermittent fever, medicines possesses specifics. If any remedies be entitled to this appellation. This applies especially to the preparations of Cinchona

Bark, of which the sulphate of quinine is the one most universally used in this Country. It will promptly interrupt the recurrence of the paroxysms in the vast majority of cases. It should always be arrested as speedily as possible in each and every case. There is no need of preparatory treatment in this disease, and should never precede the administration of some one of the preparations of Cinchona Bark. As regards the time that you should give your remedy; it is probable that if given in the sweating stage the chances of preventing the next paroxysm are greater than if it be delayed till this stage has passed. The dose should

be large enough to induce the evidence of Cinchonism as speedily as possible. This object may be accomplished by giving a single dose the quantity supposed to be required; this quantity for an adult is from ten to twenty grains. A dose of this size is generally tolerated by the stomach as well as smaller doses. The symptom of the effects of Cinchonism is tinnitus aurium. Another good way of giving the remedy is to give a large dose (x–xxgr) about five hours before the occurrence of the next paroxysm. As regards the form the sulphate may be administered, it is most effective when given in solution, its solubility can be

procured by the addition of an acid.
If owing to irritability of the stomach it
is not well borne, then you may give
it per enema or hypodermically. If gi-
ven by the rectum the quantity should be
larger than if given by the stomach.
Cinchonism is the test that a sufficient
quantity has been given; this need not
be produced only in a slight degree. In
young children an ointment containing
quinia may be used with success in
a certain proportion of cases. In giving
quinia hypodermically the preparation
to be used is the hydrobromate of quinia
as it is less liable to bring about abs-
cesses. After the fever & pyrexia have been
arrested the remedy should be continued

for a considerable period in small doses from four to eight grains daily. If anæmia exist a chalybeate should be conjoined. The diet should be nutritious and a little wine at meals is advisable. If there be constipation it should be relieved by mild laxatives. The germ theory affords a rational explanation of the specific efficacy of quinine in this disease as it is proven that this remedy is destructive of certain low organisms. Salicin, Strychnia and Nux vomica seem to be successful in a certain proportion of cases of arresting this disease. Arsenic ranks next to the preparations of Cinchona the most reliable. Eucalyptus Globulus and

Iodide of potassium have proven successful in cases that seem to resist quinine. It has been observed by some writers that pilocarpine administered shortly before the commencement of the paroxysm will succeed in preventing the recurrence of the disease. It acts most certainly if given hypodermically. The preparation to be used should be the muriate. A full opiate given at the outset often succeeds in modifying the severity of the paroxysm, and if sometimes acts as an abortive. Stimulants should be given together with external warmth during the cold stage. During the hot stage sponging of the surface with cold water together with the internal admin

istration of Crocked Ice or Ice water may be taken freely. Anoemia and anoxaemia occuring as sequels Claim tonic remedies with a good wholesome diet. The enlargement of the Spleen should be treated with some local anodyne plaster and internally the preparations of Cinchona. As regards the prophylac treatment the preparations of Cinchona should be taken before exposing oneself to the disease.

Pernicious Intermittent fever—
It occurs in isolated Cases whenever the simple intermittent fevers prevails. but fortunately such Cases are rare. In some seasons the fatality from this disease is very great, and it Constitutes

one of the most formidable of the maladies which the physician has to encounter. In this Country it is chiefly in the southern states, also to some degree in the western states that it prevails. In view of the great danger attendant on this disease, and the efficient treatment necessary, renders it of great importance. It is agreed by different observers that the pernicious paroxysm is preceded by one or more paroxysms not indicative of gravity of the disease, hence the most importance of resorting at once to prompt and efficient means to arrest the paroxysms. The symptomatic features of pernicious paroxysms vary much in different cases. Moreover

Complete Coma is characteristic of some cases, these cases are distinguished as Comatose or apoplectic intermittents, Vomiting and purging are not infrequently prominent symptoms. The prostration in the intermission is in proportion to the severity of the paroxysm. A form has prevailed in the Southern states for several years, its distinctive feature being haematuria. Hemorrhagic Malarial fever is not to be confounded with intermittent or paroxysmal haematuria, At the commencement of the hot stage urine is voided containing ~~in~~ greater or less amount of blood. Hemorrhage takes place from other situations, namely stomach bowels uterus and nose. It is sometimes the case

that hemorrhage takes place in some of the above situations without the existence of haematuria. The skin after hemorrhage assumes a bronzed yellow color. Some writers attribute this color to bile, while others say it is due to altered haemoglobin. Delirium and Coma are sometimes present but as a rule, the mental faculties are preserved. The disease is always to be considered as dangerous, and if the paroxysm be not at once interrupted, the danger is very great. Pernicious intermittent fever is often preventable and many lives are saved by timely efficient treatment. When the disease has become pernicious, there are

two great objects of treatment; one is to carry the patient through an existing paroxysm, the other is to prevent another paroxysm. With reference to the first of these objects, the indications differ according to the forms which the pernicious paroxysm assume. In case of enfeebled action of the heart, stimulants are called into play. In a vast majority of cases the gravity of the disease is manifest chiefly by symptoms referable to the circulation. In these cases the chief importance is to strengthen the heart's action. Coldness of the surface is an indication for external application of heat, by means of blankets, bottles of hot water

and stimulants internally. Vomiting and purging are to be restrained by opium. It (opii) is indicated by restlessness and convulsions. Chloroform in drachm doses as a means of abridging the cold stage, repeated till the hypnotic effects are produced. Pilocarpine by hypodermic injection should be tried also in this stage. With reference to the prevention of a recurrent attack or paroxysm, nothing can take the place of the preparations of Cinchona bark. The hydrobromate of quinia should be given in large doses hypodermically. After a reasonable time it should be repeated, and kept for some time after the paroxysms

have been interrupted. Cinchonism should be obtained and kept up for some time during the intermission, an opiate will render more sure the prevention of the dreaded paroxysm. After the interruption of the paroxysms, some one of the preparations of Cinchona should be continued in tonic doses, with a nutritious diet and other restorative measures. This closes what I have to say about simple and pernicious intermittent fevers.

G. W. Mc Lewis Medical Student.

Belto. Md.
Feb. 4th/886.

1886

[illegible] egg [illegible]

[illegible] egg [illegible] a certain period [illegible] during which it increases [illegible] the [illegible] [illegible] [illegible] egg. [illegible] at first [illegible] and [illegible] transparent and [illegible] simultaneously its mass is [illegible] by the deposit of non-elements. These modifications are the result of its structure and the materials for which are supplied [illegible] [illegible] [illegible] egg is made [illegible] [illegible] consists of the [illegible] [illegible] [illegible] and [illegible] in its structure [illegible] [illegible] [illegible]

[illegible] This [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 6 [illegible]

[illegible] which the [illegible] is consequently developed. The [illegible] [illegible]

[illegible]

Diseases of the Bladder.

[illegible] bladder [illegible] tumor is [illegible] it divides into two layers [illegible] the Epithelial and [illegible] the Hypothelial and an intermediate called the Muscular. From these layers the entire fundus is formed as well [illegible]

[illegible] the nervous system [illegible]

[illegible] arches overall will be the
[illegible] and therefore are
called the laminae dorsales. As the dorsal
[illegible]
[illegible] enclose the medullary canal from
[illegible]
[illegible]
[illegible] gradually [illegible] downwards
[illegible]
[illegible] on the median line embra-
cing [illegible] the first [illegible] from which the
[illegible] developed and the
[illegible] which encloses in
[illegible] the vertebrae and the
[illegible]
The [illegible] forward [illegible]
[illegible] upwards and a

[illegible]

[illegible]

[illegible] of the Cornea.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

into the cornea by its several folds. [illegible]

[illegible]

[illegible] over its dorsal [illegible]
[illegible] the median line [illegible] enclosing
the [illegible]. [illegible] folds are
[illegible] the fusion [illegible] at the point [illegible]
so that the two cavities coming from [illegible]
[illegible] separated by a single [illegible]
partition. This partition is afterwards ab-
sorbed and disappears and then the two
laminae become separated. The inner lam-
inae remains continuous with the fœtal integument
and thus enclosing it in a distinct
cavity. It is the amniotic cavity. The outer
lamina becomes incorporated with the vitelline
membrane with which it fuses and forms
one [illegible] the chorion. This is the amnion
formed and is the most internal of the two
fœtal membranes and enclosing the amniotic

[illegible]

[illegible] is most probably secreted by [illegible] cells lining the inner surface of the omentum.

[illegible] the omentum in the [illegible] is used with two processes [illegible] through which passes an injection into the omentum. As the breast is [illegible] [illegible] the omentum [illegible] the milk and divide it into two portions.

[illegible] intestinal canal [illegible] and the largest [illegible] abundance to the abdomen of the fœtus and contains the largest portion.

[illegible] the fœtus receives [illegible] and discharges [illegible] and is known as the umbilical vessels. [illegible] by the consolidated [illegible] duct. [illegible] and [illegible] the vessels and duct. [illegible] and in fact in the advancing development [illegible] the [illegible] cavity.

The Chorion.

The chorion and allantois are closely related in their physiological importance [illegible] "[illegible]. [illegible] accessorial visible at the caudal extremity

[illegible] and soon disappears after its [illegible]

[illegible]

[illegible] or diverticulum from the mucous and vascular coats near the caudal extremity of the [illegible]. Of fresh specimens [illegible] its cavity soon becomes [illegible] [illegible] which in a process of contraction [illegible] divided into two halves.

[illegible]

[illegible] proceeded it commences with [illegible] the [illegible] soon reaching the most [illegible] of the [illegible] covered by the [illegible] the allantoic sac [illegible] spreads over its entire inner surface. In the situation where the allantois distends [illegible] the [illegible] is consequently [illegible].

[illegible] derived from the [illegible] and the [illegible] with the [illegible] of the allantois [illegible] [illegible]. The main function of the allantois

[illegible]

[illegible]

[illegible]

[illegible] The two fuse and
the hydrocyanic acid on the surface
[illegible]
[illegible] and [illegible] without [illegible]
[illegible] The [illegible]
tion, like the [illegible] and [illegible] which are
raised up from the surface of the [illegible]
[illegible]
are into the substance of the decidua so
[illegible] without [illegible]. The [illegible]
[illegible] the surface of the [illegible]
[illegible]

[illegible] surface of the [illegible] in the [illegible] invertinved each will [illegible] [illegible] and these in turn are all separate branches [illegible] [illegible] [illegible]

[illegible] have been atrophied and disappear by the [illegible]

[illegible]

site, but from the insertions of the gestation blood vessels and gradually advance over the surface of the placenta till two thirds of it has been so bound. The remaining [illegible]

[illegible]

Eventually forces the organ beneath the [illegible]

Before proceeding to consider the further development of the placenta it will be necessary first to speak of the changes which the stimulus of impregnation has set up

[illegible]

In Cardiac Collapse dilatation [illegible] the heart [illegible] the venous [illegible] of that organ becomes passive and hemorrhagic on its abdominal surface, [illegible] hemorrhagic.

These changes are [illegible] in nature although more extensive in degree than [illegible] such constituent tissues. The result of this [illegible] [illegible] affords an explanation of [illegible] and by the process of [illegible]

[illegible]

[illegible] decidua.

Division of the Decidua.

[illegible] the decidua consists of [illegible] from each other by an interspace. They are called the decidua vera and decidua reflexa. The decidua vera is the mucous membrane of the uterus [illegible] hypertrophied. This part of the decidua lines the cavity of the uterus [illegible] the fundus down to the os internum uteri. The mucous membrane

[illegible] cavity of the amnion takes place [illegible] the [illegible] of this [illegible] filled with the [illegible] mucous which [illegible] the [illegible] cavity of the uterus.

The Decidua Reflexa.

As the ovum reaches the uterine cavity it insinuates itself between the folds of the decidua vera and becomes lodged in one of its depressions where it subsequently becomes attached. The point of attachment [illegible] the fallopian tube in which the [illegible] developed [illegible] it [illegible] at a point near the internal os uteri. This according to the most generally

Towards the fourth month of gestation the decidua vera, lined with the rapidly developing ovum and uterine structures consequently becomes thin and [illegible] and subsequently falls down-
ation sets in with obliteration of its vessels and glands so as to prepare it for separation at the full period of gestation, a period that brings it into close in-
direct contact with the ovum.

This portion the whole of its activity is [illegible] and is called the decidua serotina when the placenta is ventral-
[illegible].

[illegible] and
National Structures. With [illegible]
[illegible] the development of the [illegible]
[illegible] and the formation of its mountains
[illegible] coincidence with the descent of the
[illegible] in the Silurian times, and so
[illegible] its extent into the Carboniferous
[illegible]

3 [illegible] this is [illegible] the [illegible]

the activity of digestion is greatly increased by the blood becoming vascular over the formation of blood vessels emerging from the chorion, the development of the allantois, and the villosities with which it is covered.

Subsequently the decidua becomes more and more vascular and gradually loses their activity [illegible] the surface and becoming more vascular and finally developed at our [illegible] the situation of the placenta. At this period the decidua and the walls of the chorion continue to grow larger and more vascular while after the origin from a [illegible] place the activity of its villi and consequently distinct of blood vessels.

Formation of the Placenta.

We have just seen the villi of the chorion
hemmed in the follicles of the living mucous
of the uterus which is already greatly hy-
[illegible]
developed in number, length and bulk
[illegible]
while at the same time the uterine follicles
[illegible]
gage in a similar hypertrophy corresponding
in size with the ultimate ramifications
of the villus. Thus the villi and follicles
circumscribe each face with each other.
The capillaries between the enlarged follicles
also become unusually developed by
[illegible]
ing so that every follicle is completely covered

[illegible]

the vessels of the original decidua which [illegible] dilated. The arrangement of the fœtal blood vessels are the same throughout the formation of the placenta. In the manner previously described they continue to form capillary loops distended with blood in varyingly intimate dipilation of the chorion villi, sometimes dipping into the substance of the decidua [illegible]

[illegible]

into intimate but not direct contact with the [illegible]. The maternal capillaries on the outside of the follicles dilate in every

[illegible] spaces between them are successively and [illegible] [illegible] sinuses [illegible] [illegible] the uterus.

While the maternal sinuses are growing and the essential tufts of the chorion [illegible] the two become adherent and unite. After this union has taken place [illegible] the other. At the period of completion [illegible] the case [illegible] the structures that originally entered into the

[illegible]

[illegible] the maternal blood is everywhere separated by a thin membranous [illegible] This is the result from the union of the following membranes first the membrane of the [illegible] vessel. Hence it is seen that the vascular [illegible] within the placenta so as to facilitate the process of nutrition and [illegible].

[illegible]

The placenta fills the double office of both the stomach and lungs to the foetus. The blood of the foetus is based by the [illegible]

[illegible] accounted with the maternal circulation gives off its carbonic acid receives oxygen and the nutritive materials [illegible]

[illegible] in a fit condition for the maintenance of life of the foetus. It is supposed to serve as an immunology [illegible] [illegible] [illegible]

Umbilical Cord. The cord is described in connection with the placenta. It is the only channel of communication between the foetus and placenta, being attached to the foetus at the umbilicus, and to the placenta in the majority of cases near the centre, sometimes at the edge. It is filled with a mucilaginous substance, and contains two arteries and one vein, covered by a membrane which is a continuation of the amnion, and is filled up by a transparent gelatinous substance. It is at first straight but soon becomes twisted. It varies in length from [illegible] to [illegible] inches.

Digestion.

At the point of the study of a subject at once so grand & interesting, one is but feebly impressed with the wisdom & characteristic of its source, of the economy of the human system. Like all other natural phenomena, as the infinite differs from the finite & the creator from the creature, it presents to us problems that are involved in mystery & over which we mortals & the finite mind of the region of the study himself, but thanks be to God that after

Deity, according to the wisdom of other blood, it is evident necessary that certain things, consequently it should be approbated by man, we are able to penetrate the mysterious veil even with our feeble minds & appreciate certain facts which so much conduce to the happiness of his business.

It is with these facts only that one who occupies as yet so humble a place in the ranks of our great profession can be expected to deal.

Instilling our thoughts on the subversion of the great minds of the company

[illegible] [illegible] of these [illegible]
fessions — the source of these
precious facts, and we are led
to conclude the relation which
the process of digestion bears
in general to the rest [illegible]
fly less important functions
of the body.

While it is true that the
task process may be filtrously
conferred to an endless chain
the tracing of a single link,
of what nature of method or
mode, will it be possible
that one link be more under
favorable than another, we are
inclined to think that the process
of digestion may be seen in

food & that drink.

It is an unmistakable fact that the [illegible] of life depends upon the [illegible] of assimilation of both the food & drink, & that without food life cannot be sustained.

How is it that this food is to be obtained? By the sweat of thy face shalt thou eat bread. It is to be obtained by the exercise of every physical function which every exercise is absolutely requisite to the physiological [illegible] of the respective organs. It may be asked, Are these exercises the only requisite for the mind but the physical

[illegible]

[illegible] respiratory [illegible]
[illegible] stability of the
body or each cell of its tissues
It is evident from that our ill
constituted brain is incapable
of properly or profitably
[illegible] the exercise of the [illegible]
however strong or of sufficient
size for [illegible] purpose for the
system; that our ill constituted
[illegible] is incapable of the ef-
fort necessary to the attainment
of food for its safety & that
the hypergenic performance
of the digestive function is
impossible without the aid or
[illegible] of [illegible] the [illegible]

[illegible] system. By the
[illegible] exercise of the muscular
[illegible] system maintained
the integrity of the [illegible].

The nervous system of the
higher animals, which is where we
[illegible] considered capable of
self preservation & of providing for
himself such things as are found
to be perfectly adapted to that purpose
[illegible] breathing as it does
every function of the organism,
may be said to [illegible] in a
[illegible] manner upon the stimuli
[illegible] forced externally by the
[illegible] of disease & internally
through nervous [illegible] causing
the [illegible] effects

Respiration is a function distinct from that the tissues of the body, but the ends, instruments of nutrition, extended & regulated for their provisionment.

The body in the study of whose constitution we are able to recognize in every fibre of its tissues the impress of the tissue forger, is so constructed as to render the intervention of such a medium necessary, that the products of the external world may be reduced to such form as enables them readily to assimilable by the tissues.

Of our labor in investigating the mechanics of respiration we

energy of an animal it would seem to follow. According to that same law his physical constitution requires a variety of substances for its maintenance therefore the digestive apparatus is so constructed that each of every variety of food is provided for.

It is not for us to enter into the anatomy or histology of the apparatus or to specify the various articles of food required by a fed machine for the support of the body; but to indicate the provisions made in each of the fundamental apparatus for the different classes of food.

changes taking place in them by the action of the gastric juice secreted.

Practically it is the relation existing between the appropriated food & the secretions of the secreting tract, that constitutes digestion. The changes taking place by their action are chemical & every molecule was moved towards with the force that is its object & the facilitation of this product which taking place imperfectly, makes perfect digestion impossible. Hence the importance of the mentioned force brought to bear by the use of mechanical & of the

chylosis of the entire alimentary tract. Digestion thus may be defined to comprise the processes of chemical & mechanical nature and mechanical comprised of mastication & peristalsis.

If any single substance of the digestive fluid be deficient or entirely wanting the tissues of the body suffer for want of certain elements of food that fail. Though the heart unchanged & unaffected, yet on account of the absence of such substance, or of mastication be imperfectly performed or peristalsis interfered with so that the fluids cannot come in contact with the food &c.

if not more as quite as deplorable. It is rendered conclusive that the mechanical is fully as important as the chemical breach tissue without a thorough elimination of fluids & food would be impossible & the result would be imperfect digestion with consequent renal retrition, emaciation and death either gradual or by the invasion of disease.

Mastication is strictly a preparing tissue facilitating contact of fluids & food according to the chemistry of nature exemplified in nature down as that age is reached at which the body requires other

element. Then that food is "nature's food" viz. the mother's milk, we are furnished with the mechanical apparatus intended for the reception of food & to see with the power of instinctively an mother. These facts illustrate the new covenant of nature that we instinctively pass on from the mother to the power. Hence it is a fact that mastication is quite a foreign idea to the contact of fluid & food & this contact must be entirely to through in order to perfect digestion. The thoughtful student will at once perceive that thorough mastication is most essential & should be paid also

all, with whom he may have to deal.

There is no accounting for the wretch-
ness the sinking, the despondency
that careful investigation might
have to have nothing to impute
immediately as the cause. Great
unhappiness & discomfort might
be saved to the poor unfortunate
sufferers of indigestion, did they
but possess a more perfect know-
ledge of their physical condition
& especially of the powers of diges-
tion.

Man is essentially an immortal
& accordingly is endowed with a
moral nature, opposed
to the reduction of all things
of food. Man is not approved

phenomena of mastication, we are led to surprises, to many movements, of the organs, as those of man.

First in order for consideration is the insalivation of food which is simultaneous with mastication. It would seem to be a commodious link between the stomach and processes, serves at and only serves for facilitation of the passage of the food from the mouth through the oesophagus into the stomach. It acts chemically on certain elements of the food. By its action on starch, cooked food is converted into the diastatic glucose. The action of saliva on starch is

due to the presence of the white diastatic ferment ptyalin, converting it into glucose by causing each molecule of starch to take up a molecule of water which constitutes the only difference between the insoluble starch & the soluble & readily assimilable glucose.

Upon this all other respiratory fermentations besides the force of acting on an indefinite amount of stuff besides the product of the action be readily assimilated. Thus the bread entered the mouth being unassimilable & digestion the fermentative action is setting free the assimilation of food it itself are, but immediately

either exposed to the acid of the gastric juice it is dissolved, the pepsin only remaining active in an alkaline solution or food or bile. Concerning the temperature of the action of saliva authorities differ widely but there seems to be little doubt that it is as of just as good a character. There can be no absolutely satisfactory explanation given of the inactivity of pepsin as to the extent to the degree to which the whole amount of starch is changed but it is probable that had the pepsin been in the action before reaching the stomach to some considerable extent, there would be a corri

[illegible] transformation of Hood [illegible] 35 [illegible] as [illegible] being a very [illegible] [illegible] of [illegible] in case of imperfect mastication or indulgence from [illegible] [illegible], that [illegible] is the formative [illegible] and [illegible] what is [illegible] [illegible] transformed the [illegible] [illegible] unchanged.

Englishmen [illegible] to simply [illegible] [illegible] as being a [illegible] of the general formation of the [illegible] which [illegible] for its [illegible] the [illegible] of the food [illegible] the [illegible] into the stomach [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

The changes taking place in food during digestion, & the effects of secretional stimuli, by the ductless glands, upon the rate at which these processes have been experimentally elucidated, & recorded, must now be discussed. Here, however, although it would seem to be a matter of a very, very, long time to be the bearer of a positive fabric, a great & important work has been made to our knowledge by the experiments performed upon the secretory apparatus. But being these experiments have been learned by learning a great deal from feeding, by facilitating the effect, and of facts which have [illegible]

which [illegible] to the [illegible] of the [illegible]

[illegible] of the [illegible]

It [illegible] foods [illegible] should be mastered together and only [illegible] [illegible] [illegible]

of [illegible] hydrogen [illegible] heat
[illegible] separation of [illegible] elements
of fuel.

The watery vapour of the pedunculus
is present in greater [illegible]
at the beginning of the process,
diminishes, as is observed, but
by [illegible] the fluid must
lie in the latter three [illegible]
stages of the process. While from
the beginning the acid tendency
is more regular or uniform the
secretion of pepsin is more [illegible]
until later. Here is a more perfect
[illegible] it has [illegible] by the [illegible]
[illegible] of hydrochloric acid, from the
the full secretion of the other fe-
[illegible] pepsin [illegible] by the [illegible]

of this acid. This food is [illegible]
to a more minute subdivision
than is possible of being accom-
plished by mastication. The fact
by which it is rendered bitter,
flow upon upon the thermometer
of [illegible]. This is a [illegible]
difference. Both are made [illegible]
increasing the function of thought,
and increasing up all the faculties
we are led to conclude that it
is highly preparatory to that of
future life. In fact, the study
of all the phenomena, [illegible] we
[illegible] to see to be beyond the
[illegible] values of the factors in
the [illegible] equation, [illegible]
[illegible] [illegible] [illegible]

[illegible] fats emulsified by the juices of the stomach [illegible] perfectly emulsified by its churning action.

(N) The following action consists in the conversion of proteids into peptones & proteoseptones.

Stomach digestion consists in the transformation of food in chyme wherever it is formed or ejected into the duodenum through the pylorus.

Chyme is of acid reaction & consists of peptones & proteoseptones, fats, products of starch & fat, & a certain amount of undigested proteids.

Indirect digestion of the entire amount of any element of food does not take place until passed through all the secretions, but direct digestion

of [illegible] [illegible] [illegible]
[illegible] the [illegible], it [illegible] [illegible]
[illegible] that therefore is [illegible]
by [illegible] [illegible] [illegible] the [illegible] [illegible]
[illegible] a very short time after the [illegible] of
[illegible] of the [illegible]. Each [illegible] is
auxiliary to the others.

Oxygen is of acid nature but is counteracted by the [illegible] of the
[illegible] in the duodenum which is its
acidity [illegible]. Not [illegible] [illegible]
necessity [illegible] place also [illegible]
digestion would be [illegible] [illegible]
[illegible] with if not absolutely [illegible]
from taking place.

The [illegible] of life although not
very clearly comprehended ought to
be [illegible] to contract or [illegible]

Chapter for the Kamarathi school;
addressing on the selection of food
to consider the first taking place at
deception of the search of creation
food of man. The action in the
separation of food reduces to conform
him with the fatty acids and fre-
ly a formation of formic, forming
deep which facilitate the complete
reaction of fat. It does also after
by the oil. It leads to a good
combustion it has to assist the
proportion it is known to have
not being exposed to any special
change. The action is beneficially
appreciated. It is comparable with
that of the Kamarathi fairs.

Chapter on vegetable oils.

[illegible] the through performance of these functions which cannot in the process are but partially or imperfectly ke[illegible] [illegible] pancreatic juice all kinds of fats are provided for, forming emulsions, or globules, surrounding it to act in the simple [illegible] [illegible] are almost identical with the [illegible]

[illegible] of the pancreatic juice is the emulsification of fats, by an active ferment which it is known to possess, but which has never

yet been isolated. It is [illegible] but the [illegible] of the [illegible] pancreatic transformation into [illegible], remains still unknown, but the [illegible] is [illegible] by the [illegible] pancreatic ferment assisted by the action of the bile. There seems to be but little doubt.

Probably next in importance is the action on starch of the [illegible] upon the presence of the diastatic ferment pancreatine. We have already been seen a considerable [illegible] of the starch [illegible] the [illegible] in a [illegible] condition, not having been acted on by the ptyalin of the saliva.

Pancreatine is supposed to be a [illegible] diastase, transforming starch into sugar much more readily and rapidly. The most important function of the pancreatic juice is due to the presence of trypsine, which [illegible] proteids into peptone. Thus bacterial infection is prevented by the enzyme reduced to simple [illegible]

[illegible] essential degree, from pancreatic juice including its action, the intestinal tract affords but little [illegible] the bacteria being capable of

description given in the figure
[illegible] of the [illegible].

Although at present for lack of
[illegible] is not [illegible] to
[illegible]
[illegible]
[illegible]
[illegible] therefore unbalanced,
[illegible] following the great principle,
[illegible]
I live to see the day when all the
[illegible] connected with it will
be completed & [illegible] will be
reduced to a perfect science.

[illegible]

1806

Pneumonia

Pneumonia an acute inflammation involving the substance of the lungs. It is designated by German writers croupous pneumonia and by French writers fibrinous pneumonia. Catarrhal pneumonia differs from the fibrinous or croupous form in the seat and character of the inflammation. It attacks the capillary tubes immediately around the air-cells and is a catarrhal

the ultimate branches, and

[illegible]

[illegible] degree [illegible] solidity, [illegible] [illegible] capacity of [illegible] [illegible] [illegible]

[illegible] seasons seem to
[illegible] to meet the
[illegible] facts of the
year characterized by a
[illegible] of temperature
and [illegible] changes of
weather [illegible] wet wet.
Heat and spring are the
seasons of greatest temperature
in this country, whereas
the former, extending from
[illegible] is marked by a
[illegible] cold, dark days with
[illegible] to temperate weather
the latter is warm and
[illegible] with [illegible] weather,
but it is doubtful [illegible]

[illegible]

[illegible] to [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] and [illegible],
[illegible] [illegible]
[illegible] [illegible] and [illegible]
[illegible] [illegible] [illegible] the [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]

A [illegible] is [illegible]
[illegible] [illegible] and
[illegible] and [illegible] [illegible]
[illegible] [illegible] at [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [

[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [

[illegible] for a short
time, and then [illegible],
[illegible] on the [illegible] and
[illegible] [illegible] through
the [illegible]. When the
process of [illegible] is
completed the [illegible]
is [illegible] entirely without
[illegible] and [illegible] in a
[illegible] [illegible] [illegible]
[illegible] fall to the bottom, it is also easily [illegible]
[illegible] [illegible] the [illegible], but
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

[illegible]

being [illegible] and Carbonic acid [illegible] normal [illegible]

When the [illegible] formation takes place, the

[illegible] be [illegible]
by [illegible] and [illegible]
of the [illegible] [illegible] (1)
the [illegible] of [illegible]
[illegible] [illegible] [illegible]
[illegible] the [illegible] [illegible]
[illegible] [illegible] [illegible] but the [illegible]
[illegible] [illegible] [illegible] the [illegible] [illegible]
[illegible] of [illegible] [illegible] the
[illegible] being [illegible] [illegible]
[illegible] from the [illegible] [illegible] [illegible]
[illegible] [illegible] the [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

[illegible]

the [illegible] tubercles [illegible]
[illegible] lower [illegible] of the
[illegible] lobe of the
right lung as the seat of
inflammation [illegible] of the
[illegible].

Symptoms. It [illegible]
[illegible] [illegible]
[illegible] [illegible]
[illegible] [illegible] of a [illegible]
[illegible] and [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] and
the [illegible] [illegible]
[illegible] [illegible] [illegible]
the [illegible] [illegible] [illegible]
[illegible] more [illegible] [illegible]

the thermometer remained pe-
-rfectly stationary, Temper-
-ature rose at once, and
by noon of the first day
reached about 104°, thence
dropped at noon fifteen minutes
to three or four hours, dur-
-ing which time there was
eight alternations of temper-
-ature, as stated, and as near
hours the external temperature
was nearly equal to objective
temperature of heat as yet, but
as shortened intervals reached
hours on each successive
morning as hours passed along

[illegible] generally [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] the first day
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible]

Related symptoms indicate
that [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [

[illegible] frequent reading
of that [illegible] for
[illegible] the [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] axle

[illegible] of [illegible]

[illegible] [illegible] [illegible]

of [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] XV - XX [illegible] 4 [illegible] until

[illegible] [illegible] [illegible] to [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible]

[illegible] the [illegible] [illegible]

[illegible] and [illegible]

elements are [illegible]

[illegible] by [illegible]

[illegible] Sulphur [illegible] and

[illegible] elements [illegible]

[illegible] transmuted. During the

stage of [illegible] [illegible]

[illegible] the [illegible] [illegible]

[illegible] and [illegible] [illegible]

[illegible]. The [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] [illegible] [illegible]

the [illegible] of the [illegible]

[illegible] of the [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Occasionally [illegible] of the [illegible] inflammation of the [illegible] [illegible] or [illegible] [illegible] [illegible] by [illegible] [illegible] [illegible]

in adult life under 35 years of age.
The sporadic form is caused most com-
monly by atmospheric changes the sud-
den effect of perspiration by exposure
to cold and dampness. Dysentery is
generally a disease of hot climates and
of those seasons of the year in which
the changes of temperature from night
to day is greatest as in the latter Summer
and Autumn. It frequently occurs in
malarial regions, evidently showing that
malaria has much influence in produc-
ing dysentery, probably by causing con-
gestion of the portal circulation induced
by the protracted paroxysms of ague.
Agents whether of food or medicine pro-
ducing irritation of the mucous membrane.

may cause a dysenteric attack. Epidemic dysentery prevails in Indian jails and wherever numbers of human beings are crowded together under unfavorable hygienic conditions, which case seems to indicate the existence of a specific infective material yet it is thought to be nothing more than the dysenteric discharges themselves acquiring increased virulence by the aggregation of numbers of sick under unfavorable hygienic conditions.

It is not contagious and one attack of dysentery does not confer immunity. In fact it is said that the tendency is increased with the number of attacks.

Pathological Changes

Sporadic dysentery is later

ral in character. The majority of cases are of the simple inflammatory variety, [illegible] of that part of the large intestine where the contents remain longest in contact with the mucous membrane. [illegible] appearances swelling and oedema of the mucous membrane and submucous tissue, with an over production of mucus which is found adherent to the membrane. There is usually extravasation of blood in the mucous & submucous tissues, and as the disease advances the follicles become enlarged from retention of their contents, the result of the swelling. The vessels become enlarged and the surface softening of the mucous membrane now begins to

undergoes disintegration and gradual detachment leaving here and there ulcers. Recovery more frequently takes place in the cases of catarrhal inflammation before the softening begins, and very often after softening if the destruction is not extensive. Repair is effected by cicatrices, which are devoid of glandular structures and marking the site by a much smaller surface than the rest of the mucous membrane. Epithelial depositing is croupous fibrinous or diphtheritic in character. It begins generally as the sporadic variety, but with increased violence of congestion, swelling and redness of the mucous and submucous tissues, not only of the large intestines, but are extended to the

lower portion of the ileum and the whole of the colon. There is an extensive exudation of blood infiltrating the whole tissue of the mucous membrane which is covered with a firm fibrinous exudation. The mucous membrane is then begins to soften and the whole proper structure sloughs off, except remains of the tubular glands. These changes result in large ulcers and if death does not take place when this point of the ulcerations of the mucous membrane have been reached gangrene ensues. Repair is possible only when a double extent of the mucous membrane has been destroyed by gangrene and when recovery occurs the sloughs

Infarcts, pneumonic strangulation, the
excretions are passed by relaxation
descending down the thighs & buttock-
els. The extent to which the intestine is
involved varies greatly. The rectum, the
sig[illegible] and lower [illegible] [illegible]
[illegible] of the [illegible] [illegible] [illegible]
of the large intestine may be in-
vaded, the disease beginning below in
[illegible] and the mesenteric
glands are enlarged, softened and the
broken down into abscess. The lungs
complicate only in the shape of diffused
abscesses, from embolic obstruction
of the radicles of the portal vein. The
heart is small, flabby and its muscle
[illegible] [illegible] fatty.

Symptoms.

In the epidemic form dysentery may begin suddenly without any preliminary symptoms and with great violence but in the sporadic variety there is usually a premonitory stage which begins gradually with ordinary diarrhoea, followed by tenesmus, and sometimes with constipation lasting a few days before the usual dysenteric symptoms come on. Pain is very decided between and pain is felt along the course of the descending colon and about the sigmoid flexure, and is increased by pressure at these points by means of colicky pains felt about the

combitions. There is a burning pain in the rectum with the sense of the presence of a foreign body with a desire to expel it or to evacuate which is almost constant. The patient exerts again and again to the close stool, but it produces strong efforts at expression and for the first two days discharges more or less fecal matter but after that, the discharge consist of a jelly like matter, grayish, bright and transparent mucus, containing more or less blood and pus and occasionally a hard lump of faces, (Scybala) but without any relief. In the more prononced cases after three or four days fever symptoms make their

appearance the amount of blood discharged increases and not only the tubes epithelium, but the pellicular membrane and mucous part of the mucous membrane make their appearance in the stools. The stools now become very fetid from the appearance of gangrenous mucous membrane. During the lormina nausea is often felt, and vomiting occasionally occurs. In the severe cases, vomiting is constantly present and will materially to the gravity of the case. The bladder is frequently affected by tenesmus in severe cases. The urine is scanty, high colored, very acid and irritative. The tongue is thickly furred with a white coating.

The frequency of the stools represent generally the gravity of the case. In severe cases they number forty or fifty daily and in fulminant they may reach a hundred or more. In the epidemic form of dysentery the symptoms sets in sometimes very suddenly, but most frequently it comes on as the other form, but with increased violence. The stools being more frequent, containing more blood and pus with patches of membrane and now casts of the bowel, together with more or less gangrenous mucous membrane; great nausea and vomiting prevails, extreme prostration and great emaciation

follows; cold skin and feeble pulse; the patient face wears an anxious expression and is pinched. The parts and neighboring parts become excoriated and bed sores follows; evacuations pass with out the control of the patient. With the most painstaking care the person and bedding of the patient will be fouled with the discharges and emit a horrible fetid odor. From this condition of depression the case passes into the stage of collapse when the heart beats very feebly the sutures become loose the skin is covered with a cold sweat the hands and feet are cold and blue, the face shrunken, the eyes deeply sunk,

and the condition of the patient is pitiful to behold until it is relieved by that unconquerable monster death. Dysentery is sometimes complicated with peritonitis, hepatic abscesses, phlebitis of the intestinal veins and intestinal perforation.

In mild cases of dysentery convalescence is established about the eighth day. The signs of improvement are a diminution in the number and frequency of the stools; the reappearance of fæces and the disappearance of blood and mucus. In the more severe cases the duration is more prolonged, which generally lasts for three or more weeks. Some cases becomes chronic

and run on for months and even years.

Prognosis.

The majority of cases get well, but opinions must be expressed with caution in the early stages of dysentery, for it is not then possible to estimate the extent of the inflammation, nor its form. A favorable prognosis can be given in the catarrhal forms which continue mild, and even in severe cases if the signs of collapse are absent. In the croupous form the expression of opinion must be well guarded, as the prognosis is always grave, for if recovery does occur in these cases the bowel may be crippled from loss of structure, or from narrowing of its calibre from resulting cicatrices.

Diagnosis.

The symptoms are so characteristic in dysentery, that there is no difficulty in recognizing it. It is sometime confounded with proctitis, enteritis and peritonitis, but these all have their characteristic distinction. In proctitis the symptoms are much less severe and the discharges lack the foul odour. Enteritis lacks the tenesmus and characteristic stools. Peritonitis shows greater tenderness constipation and higher fever.

Treatment.

As in this disease the nutrition of the body suffers severely, the proper use of aliment is important from the

beginning. If the stomach is irritable, milk with a small proportion of lime water is a very good food, and when there is very little nausea and the digestion remains good, the patient can take eggs, beef juice, mutton, chicken, beef-broth, ice cream and boiled custard, and many other light and easily assimilated foods. When there is much depression of the powers of life, such stimulants as eggnog, milk and brandy and beef and brandy must be used freely. The medicinal treatment of dysentery is varied. The first and the most common medicinal treatment is to evacuate the bowel of any retained or irritating bodies, and the best measure at

Our remedy for effecting this object is by the administration of a saline laxative, or a laxative dose of Castor Oil. Of the salines sulphate of magnesia in combination with sulphuric acid in solution, given in laxative doses is the best. This must be given in the early stage of the disease before the mucous membrane has begun the process of disintegration. It serves to empty the canal of any retained faeces. It lessens hyperaemia by setting up an outward osmotic flow, and its after effect is astringent and sedative. Castor Oil may be given in doses large enough to thoroughly evacuate the bowel of any irritating matter. Opium is largely used

in the first stages of Cholera to prove
beneficial to thirty patients under the
characteristic spasms disappear the
first loss of fluid rapidly replaced by
the stomach. Opium relieves in that
instance at the considerable loss pro
duced and carried by the stomach, but
not on the intestinal mucous, producing
the Cholera evacuations. The
next in degree of the most commonly
used remedy is Opium combined with
one or other astringent or astringents
preparations. Among the astringents of
the numerous members belonging
the most effective remedies are Corro
sive Sublimate, Sulphate of Copper, Nitrate
Lead & Lead, bismuth, Sulphate of Iron.

And many others, combined with Opium. Sulphate of Copper must be given in small doses, about 1/20 or 1/12 grain with Sulphate of morphia about 1/12 grain every three hours. Bismuth in large doses every four hours has sometimes been beneficial. Numerous vegetable astringents, owing their therapeutical power to the tannic acid which they contain, have been much employed with more or less advantage, but they are said not to be equal to the mineral astringents. Prof. Dalton suggests the washing out the rectum with either hot or cold or iced water, which adds greatly to the patient's comfort and to the decrease of the inflammatory process. Very great care

is afforded by the injection of various demulcent with opium, after an evacuation or especially after irrigation and washing out the bowel. The remedy which possesses the highest degree of utility when efficiently employed, and upon which much confidence is thrown to put is the nitrate of Silver enema. A tube which is not acted on by the silver salt should be passed carefully up to the sigmoid flexure and about eight ounces of a strong solution of Silver nitrate (Ritz 31) should be thrown up, after the patient has become sufficiently cured by the use of morphia. If for any reason the injection of

fluids are undesirable. Suppositories of cacao butter containing Opium and some astringents, such as opium and tannin, Opium and acetate of lead &c., can be used instead. Suppositories of the fluid extract of ergot and of ergotin has been recommended by some of the late writers of practice and seem to be with good result. External applications are sometimes used. The cold wet pack, the ice bag and other cold applications, are sometimes preferred but generally warm or hot application afford more relief. The perineum suffers generally most

careful chart after careful application.
With the beginning of the symptoms
of collapse the stimulation should
be increased and the best form of
stimulant is Cognac brandy, as it
is at the same time astringent.
Good brandy combined with
some good nutriment as beef tea
milk and eggs, the best stimulant
as well as nutritious. As already
indicated the strength of the
patient must be supported from
the beginning by suitable nu-
trient. At the same time efforts
must be made to check the hæ-
morrhage and the bleeding vessels.
The tampons should be removed

from the apartment as soon as passed and should be thoroughly disinfected before going into the the common receptacle. A strong solution of sulphate of iron is a cheap and effective agent for disinfecting. Tincture of iodine exposed in a saucer is an excellent deodorizer for the apartment of the patient. Proper ventilation of the sick chamber must be carefully attended to.

Cholera Asiatica.

Samuel K. Pfaltzgraff.

Jan'y. 2nd 1886.

Baltimore, Md.

Cholera Asiatica.

Definition. Asiatic Cholera is an acute infectious, contagious, epidemic disease, characterized by vomiting and purging of a peculiar rice-water like fluid, severe muscular cramps, suppression of secretions and albuminuria, ending in collapse and death, or recovery from the attack and the development of a typhoid state.

It is known as Asiatic, epidemic, malignant, spasmodic and algid cholera.

History. It is known in India from a very remote period, the first accounts were not published until 1000 years

description of the disease afterwards stating its violence, and mortality.

Older writers as Hippocrates, described what they thought to be cholera occurring in various countries, but certainly, they had been describing other morbids in identical terms.

They speak of bilious discharges, but never as a mortal or epidemic disease, such as Asiatic cholera is.

Cholera is endemic in India, it has occurred repeatedly, if not annually, in the same locality down to the present time; occasionally it has traveled from India. The invasion of India by the Portuguese, and later by the English tended to spread the

disease, by communication with infected towns, to various places. In the first instance it appears to have been introduced into Malta at the second city of Gozo or about 200 miles distant. In later years it has been almost a total. In 1837, the disease appeared in Syracuse and in fifteen years was in all parts of Italy, France, Spain, and Portugal by it. The coast was ravaged, and it was advanced eastward West Africa, and various parts of Europe and at Malta proceeded to advance towards the savages. In various places as Cape Town, Bermuda, Sierra Leone, Calcutta, East and West Indies, it still continued advance, yet

causes. In the second year it was taken from Arabia to Africa. It was carried from Mecca in the same way always following commerce in some kind of human beings. Here as in other epidemics the spontaneity of the disease was again assumed. investigations disprove this, and show that it is propagated directly or indirectly by pre existing cases of cholera. From Persia it moved North to the Caspian sea, and East to the Ural in 1823 as well as to Asia minor and with great violence at Hindostan. In 1826 it being at Afghanistan. In 1829 at Orenburg and from these spread to the

Russian empire in 1830. In 1831 prevailing among the Pilgrims at Mecca for the help of Hamdin from its effects; they, returning carried it to Alexandria and Constantinople. From Hamburg it was carried East to the coast of England. In 1832 vessels carried it to France, and in one year 120000 deaths occured from it, of which 100 were in Paris, and these latter took place in eighteen days.
This was the first great pestilence from which we gained much knowledge. In the spring and summer of 1832 attending to England, and Ireland; at the

Some time ago we said that
England & Quebec and Montreal
Dominion. Also cost of their
passengers from cholera. From this
date the disease in Dominion.
Their ships were quarantined at
Grosse Isle near Quebec. On Jour-
th some of the passengers
conveyed to Montreal by the
St Lawrence steamer Quebec.
It is said also cholera
in some of their boarding houses
at Quebec. The sent out
Quebec and Montreal being thick
settled, yet it made a map with
not exceptions between the two
places with few exceptions.

It was reported of one of their over-
thrown mattresses, he had lie upon
both died from cholera. Another
man burying one of their over
thrown corpses died from cholera
with several others etc.
The town of Three Rivers for days
trembling, when it escaped an attack
for a time. In Montreal 4000 per-
sons died from the disease and about
the same number in Quebec.
It spread West to Chicago, Detroit and
various intervening places & on to
The fatality in each place was at
Ft. Dearborn, near Chicago was great.
The disease also was as far West
as the great lakes, and the

Mississippi river. In the summer of this
season again brought the disease to
New-York, and up the Hudson
and Philadelphia and Baltimore
at the [illegible] 1858 [illegible]
from the 15th to 23 [illegible]
in the West Indies, and the con-
tagion extending to the States bordering
the gulf of Mexico as well as those
of the Mississippi river. In 1834
the disease again occurred at Quebec
from emigrants, continuing to
[illegible] year [illegible] it
it subsided for ten years.
[illegible] taking [illegible]
[illegible] Brunswick [illegible]
[illegible]

sailed from Havre, England and landed at New York, the other at New Orleans. One of them lost fourteen passengers in sixteen days. The former arrived at Staten Island Dec. 2nd 1848 and was rigidly quarantined. The other at New Orleans avoided such measures: the passengers were taken into the hospital where 2500 died from the disease. In the spring of 1849 the disease spread up the Mississippi river, reaching St Louis, and Cincinnati. Boston was also visited by the disease. In the same year the disease reappeared in Newfoundland with

5000 deaths. At this time cholera had been expected. In 1853 it again started from the East, in Persia, a city of Russia, 11000 persons died; at Vienna 12000; in France - 123000, and in England 16000. In 1854 the mortality of New York was 2000, at Philadelphia 500, at Montreal 1500, and at Detroit 1000. The disease prevailing against Mecca in Dec 1864, at Hamadan in May 1865, as well in Europe and France. In this latter place during the civil war local causes, as filth, etc, was very erroneously assigned, I also being in Europe at the same time in various places

[illegible] in [illegible] the
[illegible] States, and up the Mis-
sissippi river repeating its self some-
what in the same places in 1867
[illegible] 1873 an emigrant vessel with
a healthy crew but carrying
some typhus stricken people,
landed and packing their lug-
gage in three different Western
towns where cholera broke out
in twenty-four hours. Hence the
probability of the disease existing
in clothes. This landed the disease
in France. [illegible] the
disease still lingered in
Europe. In 1881 cholera was
brought from Hindostan to

Hadjis proceeding to their to Mecca called in 200 deaths,

In 1882-3, at the time of cholera in Europe, and Egypt, sanitation and quarantine were rigid when few cases of cholera occurred. During the time in which quarantine was enforced, the result was 200 deaths from the disease because the omission of such measures. In the last epidemic in Europe the specific element was carried in rags to Marseilles, France; many other causes have been assigned with but little probability.

Epidemic. The question of [illegible] [illegible] Rivers, [illegible] surrounds it. The latter is worthy of most consideration in establishing the cause, it tends to point to a portable one, in all probability to a germ of some kind. Its secondary causes or conditions of dissemination are better understood. Its endemicity in India is not to be disputed. The cause was once supposed to be aerial — in nature, this is disproven, as for vessels sailing against the winds having on board cholera patients give the disease at the port as much as if the wind blew to shore. A high temperature is known to exist with all climates,

of rain, and dry seasons filling, do not in no tends to assist the development of the disease. When cold appears the disease tends to disappear. High temperature alone can not generate the disease, but this at the same time furnishes a favorable soil for it. Russia is disputed this point, as they have extraordinary cold seasons. This is obvious when we consider the construction of their houses, which are built to prevent the air from getting into them; hence cold can have very little effect on the disease. Fifth, fright, anger, intemperance, depressed spirits, here, as in all infectious, and

[illegible] the hospitals. Thousands of [illegible] and fear have been [illegible] as product[illegible] of cholera this, again can not [illegible] the disease [illegible] its [illegible] [illegible] cause of [illegible]. It is [illegible] that some of the [illegible] [illegible] [illegible]

way into such water. The following facts tend to make water the transmitting medium, they are plausible viz:- 1. Persons bathing in the Ganges, drink the same water, where excreta find their way, and many of these persons suffer from the disease.
2. In London a single person had cholera, whose excreta were found into the sewer, which found its way to the water supply of the city, in three days 500 persons had the disease. The attending physicians of the epidemic of 1854 at Cologne, Ger. were of the opinion that decaying animal, and vegetable matter was a primitive cause, as in that

of the carcasses of dead cattle and dirt thrown into the Susquehanna river which supplied many persons with water; but this view must be rejected in favor of the more probable view, that of the germ theory.

In localities where cholera prevailed a different source of water has been supplied, after which the disease was cut short or abated. Water is not the only medium of transmission of the poison. It has been carried by clothing, fruits and meats, as ice, as shown by various instances occurring in the epidemic of 1854. Namely, a sailor who died from it had had his chest of clothes sent home

to [illegible] in the highest degree.

It shows the importance of quarantine and sanitation.

Theoretically the disease is contagious; practically, such is not the case.

The disease is epidemic in India where it is endemic.

The essential cause is claimed to be a microscopic germ originating in India, which takes root in the alimentary canal, produces the first and typical characteristic of the disease. The specific poison is a species of bacteria, which can probably reproduce, that calls it the Comma bacillus. It forms it in the walls of the intestinal glands, blind

when kept in a dry state.

in clothes, and fomites for a long

cumal, and not the

four days.

Symptoms. Cholera like other specific diseases may be very insignificant or may be violent, and distressing so as to carry the patient to inevitable death. Individual peculiarities modify the disease.

The mildest case from the first may become the most violent in the fully formed stage.

A typical case presents three stages, viz. The first, or prodromal, second, or fully formed, and the third, or stage of reaction.

The prodromal may be of two forms either as a feeling in diarrhoea, which is thin watery,

- as the so called cholerine sometimes simulates an attack of cholera morbus. The attacks usually come on after mid-night in either of the forms and from this soon passes into its various stages. Often again it sets in as the second stage to sol, when the person is thrown down with violent vomits, and purges and sore ties, you may be frightened without explaining at what ever, when it has to paralysis of the intestinal, this is known as cholera sicca, in this cases you find the stomach and intestines filled with

clear, tinged with blood, which
gradually [illegible] the
system so that death occurs
in few hours. The stools are
marked for serosity, profuseness,
and frequency, being preceded
by a [illegible] with not
little uneasiness or [illegible]
[illegible] and being
followed by a sense of exhaust-
ion and faintness. The
so called rice water stools are
finkish from the blood contain-
ed in them; flocculi are seen also.
In cases which set in as choler-
ine you have vomiting from
the first causing great debility.

[illegible] to bring it coming [illegible]

The first vomits are undigested food bilious like, later less so and soon like the bowel discharges when the second or fully formed stage comes on. The discharges are alkaline in reaction from the phosphatic, magnesium, and ammonium salts present.

The specific gravity of the stools is 1.004; they contain a great deal of epithelium, and have under the faint microscope, a spermatic like. When the evacuations become frequent cramps begin to appear. Diarrhea is one of the various spasms.

The abdomen is drawn in and hard and fatigued. The Gastrocnemii muscles are spasmed as cramps usually commence in the calves of the legs. The pains are great at this stage of the disease, patients change their position to bide the suffering. There is unendurable urgent thirst a white and clamp tongue; the voice husky or hoarse features shrunken; sunken cheeks nose sharp and bent towards eyes, lips the contracted muscles stand out like whip cords. The pulse is quick and feeble with great debility, and a sense of faintness.

The temperature falls as low as 92°F. and even lower. The skin is cool and covered with perspiration. The urine don't flow but in scanty the secretion of milk continues. The urine contains albumen or sugar and may be suppressed. Headaches confused, and irritable senses with a disinclination for sleep, which may be mistaken for unconsciousness, are present. Patients give clear answers but resume their former condition soon. The limbs to the fluids decrease, the blood stagnates in the veins and gives the body a cyanosed appearance.

The feet and hands are cold and puckered like a washer woman's hands. Persons look as though macerated in water. The breath is cold and the pulse is scarcely or not at all perceptible. Respiration and voice may fail from failure of the muscles of the vocal cords, or drying up of their secretions. This signifies approaching death, which may be sudden during a muscular act or may be gradual by asphyxia, because the blood can not reach the lungs and heart. When the symptoms of collapse appear it is called algid cholera. Some instead of dying

after the stage of reaction; when the pulse slowly gains in strength the skin becomes warmer, breathing more easy the discharges cease and thus begins the so called cholera typhoid, which may terminate in recovery, death, and uraemia.

The latter shows a retention of effete matter which may cause coma and death. The system is greatly shattered and convalescence slow. The nervous sensabilities are morbidly increased.

The appetite may be great and digestion feeble. The mouth is hot, abdomen tympanitic and the bowels irregular.

The lungs may take on a low inflammation. The prostate gland may enlarge, a measly eruption, ulcers, abscesses, and lastly profuse sweats which carry off urea may occur.

Morbid Anatomy:- After death the appearance is very characteristic. The body has a shrunken livid aspect. Its grayish or yellow pallor of some parts contrasts with livid hue of the abdomen and back. The nose is sharp and bent to one side; the temples sallow. The skin is dry, adhering tightly to the muscles, and connective tissue. The muscles stand

out like whip cords. The body weighs less than in death.

Decomposition takes place slowly. The cadaveric rigidity is very much marked, but besides this various muscular contractions take place at time such movements as closing and opening the mouth, folding the arms across the chest, and may not the heart also contract and in recent cases of death again commence beating, and resurrection be established?

On opening the abdomen the peritoneum and bowels are dry and sticky and tend

[illegible] the [illegible]
[illegible] "noxious matter" present
the mucous membrane is
[illegible] of [illegible] the [illegible]
stage but [illegible] of [illegible]
the stage of [illegible] in the
case of [illegible] having a healthy
[illegible] [illegible] the [illegible]
[illegible] [illegible] [illegible] been
[illegible] at [illegible] [illegible]
that the [illegible] [illegible]
[illegible] [illegible] to [illegible]
ion, but is a mere intestinal
[illegible] the [illegible] of a [illegible]
flux. The [illegible] [illegible]
[illegible] blood [illegible] [illegible]
[illegible] or grayish in color

fatty globules, epithelium, fragments of gastric glands.

The follicles are enlarged and patches of abrasion can be seen. The fluid in the intestines is of a thin turbid serum containing some contents of the bowel and epithelium.

The epithelial layer of the intestinal mucous membrane is for the most part either removed or detached; the villi are as well stripped of their covering. The amount of epithelium cast may determine the severity of the case as the more epithelium

lost the last one attention go on. In the small blood vessels the corpuscles appear to be destroyed and in their clots containing blood coloring matter, granular masses greenished in color.

The liver is pale, livid and mottled. The gall bladder is filled with a dark fluid.

The spleen is small flabby soft or firm. The kidneys are pale and small the tubules are undergoing fatty degeneration. When persons recover from the acid stage and die in the stage of acet-

cow it is from uremia or the typhoid condition.

In persons dying in the algid stage the lungs are collapsed, and blood-less, the right side of the heart is filled with blood but the left side is empty from the condition of the lungs and the thickened blood which can not get through to that side of the heart. The thickened condition of the blood is due to the drainage of its fluid elements which drainage may be caused by the change of the sodium of the plasma and the potassium

of the corpuscles and thinning the thick and tarry blood is produced.

Diagnosis.—The disease may be confounded with cholera morbus, and acute metallic poisoning such as of arsenic or tartar emetic. The mortality is a great distinguishing point which is so much greater in cholera.

From cholera morbus by the quick recovery after change of weather, abandoning of fruits and indigestable food which changes produce little difference in cholera.

The cramps of cholera are milder the colicky and abdominal pains are more which shows an irritation of the intestinal mucous membrane and not a disturbance of it as in cholera, again in the former the stools are not so copious darker fetid, and not so much of a rice-water nature, voided with tenesmus instead of a mere over flow as in cholera.

In acute metallic poisoning you often have the history of some thing being swallowed a metallic taste and

the non prevalence of cholera.

The prevalence of the disease leads to difficulty of diagnosis of any gastro-intestinal discharge, as all forms of diarrhoea tend to become more violent.

Prognosis.- Other diseases have slain their hundreds cholera its thousands. The disease is more grave for young, or old. The first epidemic in a community may carry off one-half of the population. A great deal depends on the measures taken to suppress or stamp

out the disease. Hygiene, sanitation, and especially quarantine are very important factors of the mortality, not directly but as measures against the disease, as these measures may change the aspect of so grave a disease to a less frequent and more mild one. The average duration of the disease of those dying is from three to four days, of those recovering is about nine days. The mortality of all epidemics is from 10 to 70%. The average mortality is about 50%.

The mortality suffering for the epidemic of 1848 is estimated at from 75000 to 100000 deaths.

Treatment. - Prophylaxis such as hygiene, sanitation, and quarantine are important, but as before stated the disease is preventable only theoretically and not practically.

Vessels quarantined for one week, and no cases occurring may be considered safe, and Cholera need not be feared as the period of incubation is about four days

Of fourteen epidemics at New York, but four escaped

the bounds of quarantine.

Since the prevalence of the germ theory disinfection becomes an important consideration. Cleanliness, if it may be classed as a disinfectant occupies an important position other means used are such as chlorinated soda, chlorine gas, sulphate of iron, carbolic acid, and the burning of sulphur. Evacuations should be disinfected, and put under ground.

The rooms should be thoroughly ventilated, carpets raised, crowded rooms, as at funerals

prevented. All clothing worn by the patient should be destroyed by burning.

The dead should be buried soon, or cremated of which the latter is probably the better.

The water should be filtered and boiled before using, and pure and fresh supplies obtained if possible. Sewers should be properly conducted.

The diet must be fluids such as boiled milk, mutton and chicken broths, etc.

The healthy should take such diet as accustomed to, as a change of diet here is bad.

The drugs that have been used in the treatment of cholera are very numerous. The early treatment is often the most important, and this should be directed against the preliminary diarrhoea as this is the time benefit can be derived if the proper means be employed. You should keep your patients quiet mentally as well as physically which can be done by hypodermic injections of Magendie's solution, which is very efficient, as well as for the diarrhoea.

The following is Wagner's

solution some months ago

find. ℞. Magnesi Sulphas, ℥ xvj.

Acidi Sulphuric. gtt. x.

Aquæ ℥ j. M.

Sig. Eight ounces to be

injected by fundamentally

The following is very efficacious

for the diarrhœa given by the

mouth. ℞. Acid. Sulphuricum gtt. x.

Tr. Opii deodor. gtts xx.

M. Sig.- To be taken every

three or four hours.

Chloroform a powerful

sedative and anæsthetic

a deputation against the

early diarrhœa.

The following is claimed to be the formula

℞. Morphiæ Sulph. — gr. viij.
Ext. Cannabis Ind. liq. — gr. xvj.
Gum Myrrh. — ℥j.
Ol. Cubebæ — ℥j.
" Menthæ Pip. — m viij.
Glycerinæ } āā — ℥vj.
Alcohol. } M.

Sig.- Ten drops to be taken every two hours.

In the freely formed stage little relief has as yet been derived from the use of drugs. The loss of epithelium of the intestines prevents absorption of our remedies, still we should give them in the hope that some benefit may come.

The benefit from hypodermic injections is

prevented from the condition of the circulation. For the vomiting anti-emetics such as crushed ice, iced champagne, one-half drop-doses carbolic acid, drop-doses of dilute hydrocyanic acid, calomel in fractional doses, mustard to the epigastrium. For the various cramps, hydrate of chloral or chloroform hypodermically, this besides allaying the cramps also lessens the peristalsis and through this the evacuations. For the heart failure hypodermic injections of sulph. of atropia in 1/120 gr. doses - brandy and whisky also.

The last resort is intravenous injections of which a solution of three grains of chloride of sodium to one ounce of milk or water, the temperature of the body, three ounces to be injected and repeated. If the urine fails to be passed after reaction has set in six drops of tincture belladonna should be given. All symptoms arising during convalescence should be treated. Dr Ferran's inoculations against cholera, by the cholera microbe, is as yet in its infancy.

Samuel R. Pratt, M.D.

Baltimore, Md.

Jany. 2nd 1886.

Thesis.

Typhoid fever

J. S. Kloeber. D. D. S.

University of Maryland

— 1885-6 —

Typhoid Fever

Definition. — A febrile disorder, often accompanied by an inflammatory affection of the agminated and solitary glands of the intestines, gastro-intestinal disturbance, and a peculiar rash. — (Bristowe)

It stands next to intermittent fever in frequency and exposure to miasmatic contagion, more often met with in temperate climates than in extreme cold or hot regions. Though it does often occur in both of these regions. It begins in an insidious manner then occurring a period of malaise of one or two weeks before the disease shows itself. The patient has a sensation of heaviness, loss of appetite, and a chilly feeling occurs.

the nervous system under an physical power be overtaxed. About the end of this stage you have the symptoms of disease developed pulse becomes accelerated, nausea and febrile disturbances gradually approaching between the 5th and 12th days febrile disturbance becomes marked. Tongue presents a reddish appearance with edges furred. Nose bleeding sometimes occurs and is an important diagnostic sign, headache is at first severe in later stages lost after sense.

Bowels may be loose in 1st or 2nd week but always. For then may exist an obstinate constipation during 1st week 2d week then is apt to be diarrhoea

There is also tenderness over right Ileo-caecal region, about the valve. Rose spots appear on the abdomen and sometimes extend to chest and over the thighs. These are about the size of a pinhead and are somewhat elevated. They disappear upon pressure, returning in a few seconds. Generally these appear in crops, the number varying. In some cases there may be only few while again one will see myriads of them. They generally appear in 6" to 12" day from time that fever appears & patient takes his bed. They may not always be present, but their absence is most rarely in about 1%.

In all cases: Pulse in 1st week generally about 100-110; During the 2d week from 120-130; Temperature much higher during the evening than morning. Between the hours of 6 and 7 P.M. is hour of highest temperature, lowest at same hours in the morning. Age appears to be a degree higher in each succeeding evening as compared to that of day before on of morning temperature. If it remains the same can be doubtful as to your diagnosis. At time of this typhoid fever. Temperature has an important bearing upon diagnosis. Generally on 7th or 8th day maximum

is reached it not infrequently getting higher than 104°? Then we always is going to terminate fatally the temperature must terminate high. Then there is a sudden fall of temperature (surgical) you may suspect perforation. Temperature terminating at 101° is a good case. Morning temperature at 104 is most always fatal. Delirium generally comes on about 3d week. Always worse at night, may not be present during the day. Generally it is a quiet not raving delirium, though often it is most violent as it is from. A disposition to drowsiness is always present. In grave cases you have an

involuntary passage of Urine &
Fæces. Appearance of Stools is
most characteristic. Hæmorrhage
generally begins as 2° inch and
is of a pea soup color, having and
effecting and secreting odor and
when allowed to stand has a flaky
appearance, due to shreds of mucous
membrane and Epithelium which
it contains. These come from the
inflamed patches of Peyer, Numer
ous hæmorrhages is a most common
occurrence. Generally seen in about
3 % of all cases. Amount of blood
lost varies. Sometimes the hæmorrhage
may be so profuse the blood rushes
gushing forth again the amount

may be small, but the amount of blood seen is not always the whole amount lost by patient. It may ooze from the broken capillaries and collect in abdomen, where it clots by concretion & the intestines the whole amount collected may be discharged externally.

Hemorrhage will occur after when you have no reason to suspect it. In an inert case, so a Physician should always be upon his guard and not hasten a bad or favorable prognosis. A single broken Fagin's Sutch may cause fatal issues. When hemorrhage is slight you may assume that it is cap

allay, when large it is generally from an eroded vessel - When a pregnant woman is effected, abortion most always occurs -

Morbid Anatomy. -

Changes in the lymph glands & intestines and spleen - Especially solitary glands & small intestine and Peyer's patches & Ileo caecal region. More often in latter that the true lesions are found - Changes take place in the mucous membrane and follicles & these patches in upper regions & small intestine just do not give them so marked effects, but just around the Ileo caecal valve is where the ulcers

tion is the greatest. These tissues
do not consist exclusively of a simple
mucous extract gradually advance.
These changes take place in 48
hours after from the begin, at the end
of a week the bubbles are in a most
pronounced state of disease, at
the end of 2d week the mucous
membrane is generally eroded &
is cast off as a slough. The above
above changes may only extend
thro' the mucous membrane, but
at times further it goes to muscu-
lar coat and leaves that bare. - Thus
this goes through or reaches the
Peritoneal coat, when, must it inevita-
bly leads perforation of the bowels.

such are of its attendant consequences. Sometimes adhesion of the intestine to the ulcerated wall occurs where patient tends to recovery. Ulceration occurs and the patches of Peyer are swept away, seem to be the primary case of true Typhoid fever. Ulceration of these patches occurs. The Solitary glands undergo similar changes though not always to such an extent. Also have changes in the mesenteric glands. They are enlarged, these appear to be affected. Patches of Peyer undergo the most decided change. Sometimes these glands will undergo a cheesy change which is permanent and

in after years thus it is seen you may arrange the certain of Typhoid. Changes that take place in the Spleen are very noticeable. At first it is congested and tightened. In more advanced stages it becomes pulpy and pus can well go through it while it often assumes the weight of 28 oz. 70 times its normal weight. Liver is also enlarged but not to such an extent. Blood presents nothing distinctive of disease. It clots more easily owing to diminished amount of Fibrine. The white corpuscles are largely increased in numbers - and red diminished. Tongue is red at the edges & pap

[illegible] are enlarged. Blood pressure
symptoms [illegible] a tissue
blood cell is formed. Muscular
system undergoes a marked change
a fatty change [illegible] and
muscle is impeded in its function
especially abduction of thigh and
muscles of tongue which accounts
for its tremor especially in this dis
ease. Heart muscles also undergo
similar change. Many patients
who die of typhoid, dying as from
cardiac failure, due to fatty degen
eration of heart muscle. This ac
counts for weakened first sound
of heart in typhoid.
Pathology in muscles such as [illegible]

tology. It is not dependent upon vegetable decomposition, neither is it due to animal decomposition alone. It depends upon a specific poison formed by animal decomposition and always originates from the excreta of some patients who are affected with typhoid. Just what this microorganism is, has not yet been accurately determined. Bacillus Typhosis was thought to be the cause. Here the first case originates, like other diseases as Smallpox & Syphilis is not known. In every case tho' the germs of disease have been present excreta of a typhoid patient

It is not contagious, that is, it is
not communicated by simple contagion
but is dependent upon the reception
of this germ in the system. Hence
excretas when exposed to soils that
favor the propagation of the
fevers, fluxes &c. cannot produce
the disease. Emanations from these places. Neither is defec-
tive sewerage in itself a cause.
Unless the germs of disease have
been brought by human carriers to
in direct contact with drinking
water it is not apt to prevail.
Of the spring and well water has
been contaminated by human carri-
ers carelessly & poor, to contact

with it by throwing secretion on the ground without disinfecting it being filtered thro' the soil leading to water supply. Wells have been known to spread the disease, cases which occurred it having been washed in infected water. These germs unless destroyed will not pass year to year. The first changes are probably interference with the action of the liver. Stools in first stages of incubation are of a yellowish color (Clay color) which almost proves that the liver is effected, it being one of functions of liver to arrest progress of innumerous poisons received in the

sepsis, hence the congested state of bowel almost explains the presence of diarrhoea. The effect of bile being to arrest decomposition hence the want of it allows disease to have more rapid progress. Urine is effected in various ways; When temperature is high it is generally scanty with high specific gravity. When patient begins to recover urine is increased in amount and S. G. lowered. Albuminuria is found in about 33⅓ % of all cases. The kidneys never being permanently affected by disease alone. The fact of urine dribbling away also shows that the bladder

is compelled to empty bladder daily.-

Predisposing Causes.—

Age is the important factor being rare after fifty years.- Average age being about twenty one. Hardly ever seen before one year of age.- and most rare up to six years.- Boy sex is not more susceptible to disease than the other. In persons of malos habitus cases of disease to be seen more often in that sex. Certainly not contagious though it may not be it pose yourself too much.-

In Scotia when first matter was not active but seen become so when not bursting destroyed, over matter

and close attention cannot be paid to their proper disposition. They should never be thrown in drains or sewers, first they should be well disinfected with chloride of lime & carbolic acid and then should be properly buried by themselves and far from the house if possible, but always they should be put under the earth. Always avoid bringing them in proximity to the source & drinking supply of family. With these proper hygienic precautions a great deal can be accomplished in exterminating the dread ed disease from a neighborhood, temporarily at any rate. For a few

you may contract the disease from an unsuspected source. Returning to their home before the period of incubation has expired, taking rise again the malady.

Diagnosis

At beginning of an attack it is hard to accurately determine what the malady is - in course of four or five days you can generally feel certain of your diagnosis. Temperature, Sympathetic, Lingering or Recurrence. Recurrence is apt to be when these are present there can be no mistake. In first stage difficult to distinguish from Remittent fever. The thermometer

Just when clear the mind
May be mistaken for Bronchitis
with which it is often associated:
but this is not apt to occur in
early stages of Typhoid.
Diagnosis between Acute Miliary
Tuberculosis and Typhoid fever is
very difficult - frequently baffling
the most astute. In Acute Phthisis
Subcrepitant rales are found most
everywhere - again you will have
dullness on percussion at apex of
both lungs. In Typhoid where
fluid with Bronchitis or Pneumonia
you have dullness at base of lungs.
In Pneumonia you have a sudden rise
of temperature frequently reaching

106 - While in Typhoid fever there
this temperature only in later stages
and most frequently not at all. -
Again the former is a most rare
disease, [illegible] usually sufficient - but to clear all
doubt which may exist in Typhoid
fever often have an enlarged spleen.
Never seen in Acute Phthisis. - An
Ophthalmia Tarsalis in Miliary
Tuberculosis shows a degeneration
in the choroid of the Eye - which is
never seen in Typhoid.
Often associated with Pyuria, in
[illegible]
[illegible]
Contagion [illegible]

malie. Bowels between Typhoid & Typhus
Typhus being secondarily contagious
almost as much so as Small pox.-

Prognosis.

Mortality varies in different localities, averaging about 20% in all sections.- Causes of death are often complications which may arise as Pneumonia, Intestinal hemorrhage, Perforation &c.- The most grave one prognosis. Often the very intensity of the fever will destroy your patient. If by the 5th or 7th day the temperature does not exceed 104 or 105 your prognosis may be favorable.- A sudden rise, even from 103° to 105° is dangerous.

also a sudden drop to normal or about this long suggestive of Tuberculosis. String first sound of heart going through second rib is far reliable. This is most important and heart should always be daily examined; weak sound of heart is suggestive and urgently calls for stimulants. Most favorable from Ten to Twenty five years of age. After forty tendency to death is greater. Those who have been addicted to use of alcohol the prognosis is very unfavorable. In all cases we should render a very guarded prognosis recognizing the contingencies that may arise.

Treatment

Nursing is in no small degree responsible for the contagion of Typhoid Fever. The body - it becomes our duty to adopt such necessary measures both against the contamination of water and atmospheric air, and against the exposure of persons to the influence of medical contagion.

In mild cases when the temperature does not exceed 103° F little treatment is required except hygienic. These are of extreme importance. Keep the room at a low temperature, notwithstanding the complaints of the attending nurse - guarding slowly against patient

being subjected to a draught.
Have the carpets removed, make
curtains darker soon - for they might
become soiled and propagate the
germs of disease. Patient should
be kept quiet and allowed to see
none but his attendants. Diet is
of extreme importance, no one factor
holds such controlling influence for
good or evil as the case may be
as close attention to this. Only
food of fluid form should be
permitted, milk stands pre-eminent
in this regard containing all
elements required for proper
nutrition and should be the only
diet allowed unless the patient

lers of the Finest food of plain
formula. Beef tea should be
used very sparingly. You may
vary the form in which the meat
is given. You may use beef-meat
or Koumiss. This last is a most
valuable article of diet and should
always be prepared following
are directions for its preparation.
Use a common beer bottle with
patent stopper. Have it perfectly
clean. and nearly fill it with fresh
new fresh milk. add ½ oz of sugar
and 1/8 of a common yeast cake.
Cork and place in a warm spot
for 6 or 8 hours. Then place in
ice for a few hours in order for

it to cool. Give this to patient as your second meals. Another meal gives more satisfaction.
Or you may vary and give the "White of Egg diet." Beat up the white of an Egg with ℥iv of water. Strain this meal sweeten to taste and add ℥i of Sparkling Rhine Wine. This makes a most palatable diet. Typhoid fever cannot be aborted so do not give an emetic in early stages. It may run its course in a few days though not very often you are too apt to make diagnosis. It may be greatly but not absolutely. When temperature shows a tendency to become high you must diet

treatment to it, some twists it is caused by fatty degeneration of the heart, tonics and antispasmodics generally. Water is one of the best things to develop your treatment by use of the thermometer. If temperature be above 103° in second or third week you should use the cold bath of some kind. Place patient in a bath of from 70-75° F. and when temperature falls to below or to 103 in two or three minutes immediately remove the patient, dry well and wrap in blankets, but when it begins to fall or twenty minutes to fall let the patient remain till temperature

reaction set then remove. This fall may last for five or six hours when it may be repeated; but never for more than four times. If temperature still shows a tendency to sleep into you may use the sponge bath. If patient shows a disposition to sleep better, and respiration shows no fear of heart remaining strong you may beneficially repeat the bath. Sponging is always advisable. Sponge the head down to feet, then cover warmly and sponge the other side. Although be [illegible] of best agents for subduing

high temperature. This agent and water act together admirably. Following the bath, with doses of the drug. Must use large doses to get good effects of this efficient remedy. Must use from gr XV-XX at a dose. This will suck due for awhile, in a few hours follow by gr XV more. Antipyretic effect is more persistent when can use it hypodermically. Hydrobromide is better for this, one grain being equal to three grain by the mouth. Mineral acids are also good. Especially Dilute Hydrocyanic. This can stimulate the gears, as it is

somewhat astringent it has to be [illegible]
Tongue certainly clears up under its use. Can use in form of [illegible] mixed with [illegible] of water and breathes to taste. When diarrhoea is moderate in first weeks it is not well to interfere. In latter part of second and third weeks when if does not increase it assumes a different aspect - for it is very necessary to retain and have to alimentation. It must then be checked and for this nothing is so good as opii. [illegible]

Some use Tannic acid while others
prefer the salts of lead but the
effect itself is efficient.
When we find such increase of
diarrhoea, tenderness on abdomen and Epithelium of tongue
stripped off and presenting a
glazed appearance, temperature
is one of best guides to use
this condition shows danger of
perforation, but be use in form
of an emulsion and in small
doses. of Ottomanin gr. XXX
G. Acacia Sol. Fiss
M. Sig Fri dose. Ad limen Pa
Typhoidal must always be
treated like Typhoid with

flannels laid over the Abdomen.
[illegible] urgently need treatment. Pain
[illegible] be given in small doses. administer 1/32 gr ℞ Morphia Sulph.
and repeat every fifteen minutes
till it is controlled or not more
than 1/4 gr is given.
order ℞ Morphia Sulph. gr i
Aquae ℥iv
M. Sig ℥i every 15 minutes. If patient
becomes quiet before eight doses
have been administered, cease.
When delirium is mild you get
good results from the use of
Potassii Bromide gr xx doses.

Chloral hydrate is also good when there is but little weakness. When patient is strong not delirious, but restless it is a most valuable agent when congestion occurs. Fruit is in large patient fairly screaming from its severity. Patient will pick his hands to relieve tension. Poison gives me fever, decided fever [illegible] [illegible] of internal temperature. This is most dangerous symptom of typhoid. Use most strong [illegible] tissue destructive action and lessen the progress of the higher motion. It is the best [illegible] stimulant. If cause does be a complication it is through the

medicine of this agent, [illegible]
by and best in form of morphia
hypodermically. Large doses and
[illegible] [illegible]
This is also good when [illegible]
occurs - but one may get better
results by combining it with a
direct astringent, but it is in
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
seems to be a good. Applications
of cold and Weight Skin-cancer
surgeon is of importance - [illegible]
small amount of ice in a bladder
or India rubber bag and place
on [illegible] [illegible] [illegible]

-ophy, there is no agent capable of more good when properly used in typhoid than alcohol. Certainly none are conducive of more harm when abused. The indications for use of stimulants in typhoid should be drawn mostly from the heart. They should be directed especially to its weakness, and this is indicated by a feeble first sound of heart. In connection with this there is tremulousness of muscles of tongue, tongue with a brown coat. You should watch your patient most closely for the effects of the stimulant may be bad. This you can only tell by employing and

closely watching the effects. Give
half a teaspoonful of sherry and repeat
in 2 hours if this produces a good
effect let it be continued and give
food, and you may cease the stimulants
and tonics. On the other hand if patients
show a disposition to improve
hearts sound increasing and pulse
lower and stronger you may continue
its use. Hygienic measures
are of importance. Keep temperature
of room low. Food nutritious
but simple of low proteid and
fat. Fluids of low proteid and
fat. Fluids of low proteid and
evacuations should be watched and
disinfected at once. Constant care
must be taken. Vigilance and
patience are the price of success.

Injury Complicated with Fracture
in addition to usual treatment
you should change patients posi-
tion constantly to prevent the
effects consequent upon congestion
of blood - After the second week
you should daily watch for Bed
sores - they are most apt to ap-
pear over Scapula, Nates and
Ellow - A slight blush must
first be absorbed. You must
be prompt in treatment - wash
with Camphor rotin or Alcohol
and remove pressure with pillows
If Ulceration has taken place
first wash with Solution of Cor
boric acid gr v - to ℥i Aqua

and brush over parts with Bar
ium fluid. Hunger & Relapse
are very great in Typhoid. The
slightest indiscretion in diet
or exercise may cause it. There
is no time when appetite is more
ravenous than during convales
cence from Typhoid - but never
under any circumstances allow
other than ~~[illegible]~~ prescribed diet
is best. - Have your patient
avoid a warm room. - and
only venture out in middle of day.
With these precautions and
care you can easily avoid
this contingency. Should it ever
occur it is apt to run the

[illegible] course as formerly dis-
though not so severe - but that
it is free from danger on the
contrary it is [illegible]
[illegible] to the [illegible] [illegible]
ction - The treatment is about
the same -

Music of School Children.

H. W. Fishel, B.S.

Baltimore, Md. Jan'y 26, 1886.

Hygiene: Sight & Hearing.

It is a noticeable fact that as civilization advances disease increases. This is particularly noticible in diseases affecting the nervous structures and their functions, the brain and the eye. Of the five senses, that of sight is the one most perfected in the acquisition of knowledge. For this reason then, the teacher and parent should see to it, that this valuable organ – the eye – is not injured or diseased by overexertion or injudicious

[illegible]. Every [illegible] should be taken to shield it from injury.

A healthy normal eye is not an [illegible] sphere — but a spheroid whose antero-posterior diameter is slightly longer than the vertical or the transverse. The dense sclera is [illegible] and covers [illegible] very little in different persons. The cornea is a segment of a smaller sphere than the sclerotic proper, and is set on the anterior part of the eyeball a water crystal which accounts for the increased [illegible] to outer parts only.

When an eye receives parallel rays of light and focuses them on the fovea of the retina a clear [illegible]

[illegible] relative [illegible] the [illegible] [illegible] [illegible] [illegible] the [illegible] of the [illegible] [illegible] to [illegible] a distinct and clearly defined image on the retina of a normal or [illegible] eye.

The eye which can not focus on and see the retina without excessive accommodative efforts on the part of the ciliary muscle is called an [illegible] or [illegible] [illegible] [illegible] [illegible] [illegible].

Myopia — [illegible] is a [illegible] [illegible] [illegible] [illegible]

[illegible] can cause to [illegible] [illegible]
[illegible] [illegible] to it by the [illegible] [illegible]
[illegible] there is no [illegible] or it is very [illegible]
[illegible] [illegible] the light is reached by
reading the [illegible] [illegible] of the [illegible]
color of the [illegible] [illegible].

[illegible] [illegible] [illegible]
[illegible] with the [illegible]
[illegible] [illegible] [illegible]. [illegible]
[illegible] the [illegible], the [illegible] [illegible]
[illegible] to be [illegible] [illegible]
[illegible] have an [illegible] [illegible]. [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [

used by the friends of mankind to describe diseases of a very various character, comprehending the terrible medical tortures to which the unfortunate victim of disease has been subjected.

Etiology.— The most potent cause of impotence of heredity is the abuse of medicine or effects of medication. Next to this may be placed a hereditary predisposition. Physicians have noticed the increase of this disease in the colored race, as a result of the enormous rate of sixty to a hundred of their race between one years of age. Now that

[illegible]

[illegible] the [illegible]

[illegible] internal structures of the eye or other articles which [illegible] increase during [illegible] and [illegible] in some cases the loss of sight.

What the means by which these changes are brought about, is a difficult question which [illegible] could work at short distances by [illegible] [illegible].

[illegible] with the overexertion of the eye causes congestion. This is followed by [illegible] forms of inflammation and diminished resistance of tissues of the eyeball, allowing them to yield to pressure from without and more readily change their shape.

To the sclerotic coat of the eye are attached the [illegible] muscles, as the [illegible] or [illegible] of the eye. [illegible] the [illegible] of the [illegible] of the [illegible] and the [illegible] the [illegible]. [illegible] the eye is [illegible] and [illegible] is [illegible] [illegible] [illegible] of the

[illegible] fixed upon the [illegible]
and upon each face of the [illegible]
[illegible] the direction of [illegible]
[illegible] which is [illegible].
These lines should be drawn [illegible]
the [illegible] of [illegible] bodies [illegible]
[illegible], by [illegible] the [illegible]
[illegible] of [illegible] and finally the [illegible]
[illegible] these [illegible] [illegible]
[illegible]. Now there is [illegible]
an [illegible] of [illegible].

Some [illegible] are of things
on which [illegible] is the [illegible]
[illegible] of [illegible] [illegible] [illegible]
[illegible]. Hydrogen is [illegible]
[illegible] [illegible] the [illegible] of [illegible] [illegible].
Second Statement. Show the [illegible]

results:— One percent of young school children of German parentage are myopic. The children from six to seven years of age in the public schools of New York city are myopic to the extent of three and one-half percentum and as they become older and their tasks are multiplied and more severe, their myopia increases proportionately.

Percentage of Myopia in School children of	Age 6 years	Age 8 years	Age 10 years
German parentage	11.	55.	63.
American "	3.5	40.	41.

[illegible] the [illegible] of [illegible] [illegible] [illegible]

—

cy of twenty-one years, he was found guilty and condemned to a further term of years, making the sum total of imprisonment he should undergo exceed a period of four hundred years.

He spoke publicly that he was not prepared for the loss of twenty years, which was likely to occur. After it was filed he was of the fact that he was imprisoned at Cork, expiring this and prolonged other charges, as murder and forgery and he could not stand all 2 sentences, do not become operative. The murder began to have his trade from the eighteenth to his twenty-first year

[illegible] the eyes are found
fairly, so more liable to strangulation.
And also be is a place to hide eye.

The stereoscopic will take
copy during the day and I assure
the same at night is not indicated
to the dreaded muscles for the
reason just assigned.

The act of reading is performed
with so little effort that the
complainty is not appreciated.

The strong muscle within the eye
and internal orbits without are
supplied by the third nerve. So
reading tells on the muscle into long
sympathetic. The nerve is the
media of accommodation the —

tional reflexes as the muscle of convergence which the other muscles of the eye move it from side to side of face so as to get the rays of light from a distant point at the exact instant of time. This combination of a fixed and movable eye by an instrument for a reason of fixed of time. Thus be a centered without fixed of the eyes as found in not which and the [illegible] of future optic angle. [illegible] by a often seen head [illegible] [illegible] or [illegible] the last or [illegible] strenuous efforts to read [illegible] or [illegible] the light with [illegible]

light, but of course it would increase the congestion of the already inflamed eyes. It is he may continue to do for a time, with no loss of exercise to rest his eyes, gaining a little in knowledge, it is true, but losing much more in the abuse of his eyes.

The popular idea that a pair of stronger glasses for astigmatic eyes is fallacious. They may need glasses as soon as other presbyopic eyes, but this is not a result of greater power. They do not affect better because the cones have been brought closer to the eye and have a little

image is obtained. Presbyopia at its early stage corrects short sightedness. Erismann found that in German pupils who read in two hours daily, 1% were myopic;

four " " 20% " "

six " " 40% " "

This percentage is much higher than it would be in children of Russian or English parentage, because while children are born myopic they are born with a predisposition to it directly inherited. This accounts for the fact that Russian-Jewish children show the highest percentage of myopia.

I have found the following data from an examination of the children in the public schools of New York city:-

" German	"	20%
" American	"	10%
" Irish	"	1%

Hygiene in colored children does not often average 3% however and is frequently as low as 1% percentum depending on the amount of study.

The proper way to make the estimate of mikra, caused by study in schools and colleges, would be to examine the pupils when they enter and

make a record of the condition
of both eyes in each case together
with any hereditary tendency, &c.
This should be followed a[illegible]
[illegible]
[illegible]

[illegible] the rays of light are [illegible]
ate the eye from other color are
[illegible] the light from one or other
side cut off.

The fewer rays of angular or
ees from nearly two to fifteen
hundred are [illegible]
[illegible] depending on the [illegible]
of light admitted to the eye.
The rooms were planned at two
in school buildings located in di
[illegible] and crowded sites. It
is claimed by some authorities
that the window surface should
represent one fifth of the floor
feet as the floor of the school room
and that the window sills should be

from [illegible] the place. It should be of [illegible] to admit a good light. It should be protected from the [illegible] by having blinds to roll up and down at pleasure.

The [illegible] of the [illegible] should be [illegible]; probably a bed of [illegible] would be best for the walls. The ceiling should be white. The artificial light used at night should be applied just to one side from the [illegible] equally to all parts of the room.

The desks should be at once comfortable and convenient.

Step should be constructed with an adjustable foot rest and a seat just high enough to allow the sole of the foot to rest on the floor and wide enough to support the thigh throughout its entire length. The back should be adapted to the curve of the spine. The leg should slope slightly forward the knee to be recovered for rocking. The outer edge of the tab should extend over the outer edge of the seat by inserted another and should be inserted another over the seat thus the latter is to the floor. In a healthy child the foot rest and back are made to support the muscles

[illegible]

[illegible] with the [illegible]
[illegible] deep [illegible] of the eye. The
[illegible]
[illegible]. Little should be [illegible]
[illegible] rest [illegible] [illegible] manuscripts in
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible]. You will see the muscles
[illegible] which are so susceptible of
fatigue as the other muscles of the
body. This is a just reason for
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [

indifferent work. The figures have more cause for complaint in this respect than Specimens. These books besides containing all the faults mentioned have lines which are any thing except clear, distinct and easily distinguishable by the eye.

By the advice of educators and physicians publishers of text books have made solid strides in improving the size and clearness of the type and the quality and beauty of the paper. The paper now used is heavy, well calendered and pure white on which the letters are printed of good size with black and well defined outlines which are also the most

and surnames. The heads of the name of people have separately to be type. It should be large enough to be not only easily visible but distinctly legible without any effort of the eye. Second editions of books are not only to be sold for election but for gross profit as well and should be abolished by law.

Work surfaces with black forest to write upon there would be a great improvement on the black boards now in use. Text books on geography could be much improved by having the front and fewer names but black names on the white half of block map very trying to the eye. To say nothing about the number of the

books. Drawing lessons and fine work should not be carried far enough a time because of the injury the eyes do to the eyes. It has been ascertained by careful observation that in schools where least time is given for exercise the percentages of sickness is highest and <u>vice versa</u>. There is no question the policy of brief periods of study alternating with short periods of play in primary and secondary schools. These play periods may at times be devoted to the teacher and may consist of gymnastic exercises or calisthenic songs. Sometimes pupils frequently, do too much study in a night. There should be a limit

food. A fully developed case of Study but there are many cases of an amount quite sufficiently bad the growing pupil would by such a course subject his eyes and general health to severe endurance.

Pathology.— The pathology of myopia is not confined to the shape of the eyeball or attachments in the shape of the outer membranes of the eyes. The pathological defects are found at and near the posterior of the eyes and sometimes in the retina and even the fovea of Sampson is lost.

When a month passes the eye is nature directing the efforts and

a blood vessel in the retina of a person in the throes of a violent fit of anger appears because on the spot. Apoplectic persons are not the school boys supposed to overcome pressure because of the excessive convergence of their eyes to see near objects clearly. This causes increased tension of the globe and establishes congestion of the choroid which is followed by softening and extension of the tunics of the eyeball at the optic fossa the point of least resistance. The choroid being stretched at this point results in a deep excavation in a manner which is set up by a strong

fundus with the exception of complications involving the retina. There is no outward sign for these changes in the interior of the eye. They creep on insidiously and are seldom recognized. They are not uncommon. Steffan has shown that in over five hundred cases of myopia 19.1 per cent had changes about the optic nerve and in nearly 11.5 per cent the central portions of the retina had undergone changes. Separation of the retina is the cause of nearly five per cent of blindness and central retinal change resulting from myopia causes 6.5 per cent of it.

Prognosis.— The prognosis is "once myopic always myopic." Without convex or concave glasses it will eventually terminate in weakness of the eye or entire loss of sight.

Myopia sometimes causes divergent Strabismus.

Diagnosis.— Myopia is often overlooked in children. Eventually however by accident the fact is or by his teacher makes the discovery. In attempting to read characters on the blackboard surface at twenty or thirty feet distance the pupil finds it impossible, or the teacher or boy and all behind which he desiderates and with ease and comfort.

In consequence of this lens will show a protruding eye which is an elongated one. This gives a feeling of pain and fatigue. Minus glasses give relief and can be used to aid in making the diagnosis. Other aids to diagnosis are the test types, optometer and opthalmoscope. The latter gives a knowledge of the condition of the tissues of the eye to deep.

Treatment. Prophylactic treatment is the most successful and useful yet it will not cure the future where eyes are already myopic. So much has been said incidentally under the head of

that little [illegible] need be added. Both with the [illegible] light and a good quality of [illegible] light [illegible] shaded in a good light. If cases of intervals of rest for the eyes be to strictly observed. When the decline has begun, or when under other conditions the sight is improved by glasses, they should be worn. When the ophthalmoscope reveals a strong and extensive patch of the retina which is due to atrophy of the choroid at that point, there may follow either further changes for years or even during life — or active changes may at any time begin giving the patient fears over the loss and dazzling

the sight or exposure to sunlight or after severe exertion. While the disease is stationary a pair of concave or convex glasses good and sufficient light and the avoidance of a stooped attitude while reading or writing is all that is required. To the progress form all that can should be done to retard or entirely stop its progress. Promote the general health by such remedies as the patient's circumstances require. Figure shot observe of the laws of hygiene. If the health be due and it is found by us to convert enforce rest of the eye. Tonics may be offered

to the temple, or what is better the artificial leech may be used to withdraw the necessary amount of blood - from ℥ss - ℥j. Patient should be left in a dark room until he can tolerate daylight. Blue glasses may be worn for the first few days after out of doors. If dangerous chloroidal corrosions in large doses for life may be continued for some time to prevent progressive flammatory changes in the choroid. Because glasses are essential to correct the focusing and gen. good vision. The patient should not in the prone position or any way violate directions herein mentioned.

There are numerous other conditions to which the eyes are subjected in school and college such as conjunctivitis, strabismus, hypermetropia and asthenopia.

H. Warren Fishel.

Baltimore, Md. January 25, 1886.

Bronchitis,

1886,

T. L. Clymer.

(2.)

But if not, till the patient is exhausted, do not draw blood. You can give minute doses of Antimony. Small doses of Calomel is very good also. Give gr. ¼ ss every two or three hours. Inhalations of Aqua Ammonia, steam & numerous other remedies are used, but these are the best. If much obstruction give an emetic. In chronic cases, have the patient change to better climate.

F. L. Clymer

1886

The temperature is much higher & more dyspnoea than in the Chronic form. The smaller tubes are apt to be invaded. Physical Signs.
Rather dry, but in ~~Chronic~~ bronchitis if you can hear a flapping sound, it is diagnostic, with the membrane — expectorated.
Prognosis. In acute form fifty percent die. They die quickly but in chronic form it is more favorable. It is always a grave disease.
Treatment, As it is attended by high fever, as in Laryngitis, you will get good results by ~~abs~~ extracting blood, that is if you see the patient in the early stage.

not a cough but dry. In old persons when dyspnoea is present, there is profuse secretion of mucus, which literally drowns him. Give a lack of Ammonia & Hydrochlorate of Quinina injected hypodermically.

The Croupous form. It often occurs from an extension of true croup, but it also begins independently, & is in the tubes alone. It is rather rare. Sometimes when hacking cough, the casts of the tube are thrown up. This is really the only diagnostic sign. (You tell it by placing the membrane in water.

CAUSES. - The causes are unknown. It is found in delicate subjects.

(2 3)

Treatment:- Hygiene, change of climate to one of a more even temperature. Wear flannel the year round. This secures an equal temperature. Avoid night air. All mechanical irritants must be removed. Tendencies to Gout & Rheumatism must be combatted. Steam inhalation, especially in the dry form. You use steam when the cough is out of proportion to the amount of expectoration. Inhale acid a little terebinthinate to the water or Comp. tinc. of Benzoin. Use the potassium Iodide of Potassium. It will remove the thickening in the bronchial tubes. In spasmodic asthma, use hypodermic injections of morphia is best or inhale a few drops Ether or Chloroform. Counterirritation, as Stoupes of turpentine. Do not use

often hear all kinds of rales in the same case. One additional sign is a marked prolongation of the expiratory sound. While in health the inspiratory is as 2 to 1, but now it is often changed.

Diagnosis, Can be mistaken with phthisis, from the prolonged cough, & the expectoration, hence we should be careful how we make a diagnosis. Rales are not heard on both sides, nor diffused as in consumption. No a marked dullness in Bronchitis, & more emaciation in Phthisis.

Prognosis, - Usually it is good. If he can secure by hygienic measures, he will get well, while otherwise it will continue through life. In old people it is not favorable.

Symptoms. Same as the acute form, except its chronicity. We do not see Patients in the dry stage, but in the moist. The most characteristic signs are persistent cough & fine rales. In these you may have all kinds of moist, or even dry, rales. Chronic Bronchitis is secondary to these diseases. It is exceedingly common in phthisis of gout, in Psoriasis, Eczema, & in such cases you treat the skin disease. Chronic alcoholism is another very common cause. It causes a hyperaemia of the capillaries, of the air passages. In the chronic form we have no fever also the auscultation signs are much alike, but you

venous blood, & pigmentary changes. Sometimes even ulceration. ~~of the~~ The mucous follicles are hypertrophied. There remains a constant narrowing of the bronchial tubes & dyspnoea, is present. Patient usually dies of some ~~[illegible]~~ intercurrent disease. [illegible] cases is bronchial dilatation.

<u>Causes</u>) - Usually a vice of constitution - most common is phthisis. Colds & ~~[illegible]~~, are the exciting causes. In old people the cough is abated in summer comes on again in autumn. In winter there is profuse expectoration.

Chronic form of Bronchitis:
This may begin as a first.
In such cases you will find some fault of the constitution, or some irritant - (as) constant exposure to irritating gases & dusts, as (miners) & (knife) grinders bronchitis is always chronic. Again this often accompanies obstructive diseases of the heart. From damming blood back on the lungs. In such cases you will hear dry or moist rales, scattered all over the lungs.
Morbid Anatomy. Is like acute bronchitis; mucous membrane is hyperaemic, purplish, or slate color, from

(18)

coming to ice; [illegible] often be well in a day or two. If not better next day, rub the chest with equal parts of turpentine & Sweet oil. If this does not suffice, give some syr. of expectorant as Vine. of Ipecacuanha ℥ss-xx or Vine of Cicutina, or the Comp. Glycerrhiza. If it still keeps up you use tonics, as Quinine grs. ij-iv ter die, also give little Vine. Chloride of Iron. If there is any history of Gout use gouty treatment, as Vine of Colchicum rad. If rheumatismal law. Give Alkalies & Salicylate of soda grs. x-xx. If other complications as they arise treat them.

rales, later, absence of respiratory murmur & flatness on percussion.

Prognosis - It is usually good. But in the very young or very old, it is a grave disease, because it becomes capillary bronchitis. Again there is a difficulty of expectoration. Dyspnoea & death. It may terminate in recovery, death, or chronic form.

Treatment - Many cases get without treatment.

Hygienic regulations, shorten the attack. Have the patient stay in his room, breathe moist air. A good plan to give the patient a Cover's powder & put the feet in hot water, bath or

Sometimes when mucus has collected for a little time, you may have some dulness until coughing takes place.

Diagnosis. It is very easy, may at first be confounded with pneumonia. In pneumonia the pain is unilateral & much more intense. In pneumonia much more fever. In pneumonia if it is ushered in by a chill, & in pneumonia you have rusty sputa. In bronchitis we have a glairy mucus. & again the rales of bronchitis will enable you to tell the difference. Again from pleurisy acute limited pain. In early stage friction

In the early stage there is a preternatural dryness; & we always find sonorous rales in the large tubes & sibilant in the smaller tubes in this stage. But later, when the secretion is present, we have the coarse mucous rales in the larger tubes & finer mucous rales in the smaller tubes. We may have these rales in other diseases. Such as pneumonia & phthisis; which denote a complication with bronchitis. Percussion note is not usually appreciated, except when a complication exists. We do not hear any dulness, because there is no obstruction

or 2nd in the chronic form, which may go on for years.

Pulmonal Signs. They vary as to the period of the disease.

Certain signs distinguish this disease. First in the dry stage we have a swelling & stiffness of the bronchial tubes. This swelling narrows the tubes, & so narrowed tubes are formed. We will divide the rales according whether they are in the dry or moist or first or second stage.

Rales.

1st stage
Dry { Sonorous (in the large tubes)
{ Sibilant (in the smaller "")

2nd stage
Moist { Coarse mucous rales.
{ Fine mucous rales.

not all over the chest, & lower part of the trachea, but not usually severe. The pain will be a diagnostic sign, between it & pneumonia by the pain in pneumonia being of a dull cardiac type & more or less severe. From pleurisy, by its pain being sharp & very severe. & the sensation of [illegible] in the throat & trachea. The cough is very paroxysmal & dry at first, then a glairy mucus, & then muco-purulent. It often keeps the patient from sleep. Its duration is from four to five days, to two or three weeks. It has no definite limit. It usually ends in two ways viz: 1st In complete recovery,

following the pneumonia in scrofulous patients, the bronchial glands participate in the inflammation, become hyperaemic, swollen, & filled with secretion, & not unfrequently the glandular elements undergo a hyperplasia, finally the cheesy metamorphosis. Symptoms.- The patient will give a history of having caught a cold, & then will complain more or less of a sore throat. He will have a sense of chilliness, but no rigor, as he would have if it were pneumonia or pleurisy. The temperature does not exceed 102° or 103°. He has some pain beneath the sternum but

Pathological anatomy. Hyperaemia of the mucous membrane of the bronchial tubes, manifested by a diffused redness, swelling of tissues, & diminished secretion. This is followed by an increased secretion ~~after~~ over growth, and degeneration of the epithelial cells, together with a copious generation of young cells, the expectoration then begins of a yellowish color. As a result of the hyperaemia, rupture of the capillaries of the mucous membrane presents occasionally. The slight expectoration of the first stage is streaked with blood. In cases of bronchitis

irritating vapors. Second or secondary as from pneumonia, phthisis, or syphilis. First, it has been to obstructive troubled the right side of the heart.
When it is secondary to phthisis it is more or less limited, it ~~is~~ generally denotes more danger than if it were diffused all over the whole lung. In croupous bronchitis, the fibrin may go through the whole of the tubes, the small as well as the large ones, but in the catarrhal form, it affects principally the pharynx, larynx, also the trachea, even the capillaries; or it may stop from the capillaries, but be quite rare & go upwards.

The acute catarrhal form of Bronchitis, is essentially an inflammation of the bronchial mucous membrane; & it may also extend to the submucous membrane. It will affect somewhat the upper part of the tube & then will gradually extend downwards to the middle size & then to the capillaries. It generally comes from a cold in the head, nose, & throat. It also affects the middle size tubes, but it affects the finer, & when it does, it is called the capillary form.

Causes. They are divided into three classes. First, from any that is due to any assure to cold or,

to the house. The average duration of acute bronchitis is ten or twelve days. In severe cases, after five or six days patients are usually able to be out of doors.
The disease may be divided into two stages. The first stage embraces the period during which the expectoration is scanty, transparent, & viscid. The second stage extends from the time when the expectoration becomes abundant, opaque, and thick & then they will tend to go on to convalescence.

diminution of resolution of the inflammation. Respiration is not sensibly affected. No portion of the lungs is withdrawn from the exercise of its function, as in pleurisy & in pneumonitis. Dyspnoea is not produced save in the exceptional cases in which, from feebleness, or the want of voluntary efforts of coughing, the mucous secretions accumulate sufficiently to obstruct the bronchial tubes. The affection is not accompanied by much debility. Patients are generally not confined to the bed, & they may not confine themselves

loose, the acts of expectoration being easier, unattended by pain or soreness, & followed by a sense of comfort. The mucous secretion is rarely sufficient to accumulate in the tubes & occasion embarrassment of the respiration. This may happen in young children, & in the aged, & in feeble persons.
The presence of a collection of mucus in the large bronchi or trachea is felt, & the patient is led to make voluntary efforts of coughing for its expulsion.
The decreased amount of the inflammatory products & the change in character, denote

efforts. If the paroxysms of Coughing be frequent & severe, the traction of the diaphragm occasions pain, & soreness, refered to the false ribs & the ensiform cartilage. The patient feels as if a more abundant expectoration would give relief, & desires to have the cough loosened. The expectoration is at first small, glary, frothy, & viscid, & occasionally is streaked with blood. In the progress of the disease after two, or three, or four days, the expectoration becomes more abundant, & consists of thick, yellowish or greenish sputa. The cough is then said to be

but is not usually lost. Lassitude is complained of, with a general feeling of malaise. Dyspnœa is moderate. The pulse has not the frequency & strength which it has in pleuritis & pneumonitis. The heat of the surface is not notably raised. The cough is at first painful, but not sufficiently so to be suppressed. It is at first dry, the secretion of mucus being for a time scanty. Deep inspiration, breathing cold air, & the exercise of the voice, excite acts of coughing which occur in paroxysms, & consist of a deep inspiration followed by a series of expiratory,

points of contrast with acute pleuritis & pneumonitis.
Pain is not a prominent symptom, but the patient has a sense of constriction & of soreness or rawness. These painful sensations especially accompany acts of coughing.
The pain is of an obtuse or contusive character, & is situated beneath the sternum.
The attack is rarely accompanied by a distinct chill, but a chilly sensation, followed by flashes of heat, are frequently repeated during the course of the disease. The appetite may be more or less impaired,

2)

the pharynx & larynx in its passage to the bronchial tubes. The period occupied in the passage, varies from a few hours to one, two, or three days. In a certain proportion of cases the bronchial tubes are attacked at once without any affection of the air passages above. It is probably not correct to regard the affection successively of the nose, pharynx, larynx, trachea & bronchi, as an extension of the inflammation from above downwards, but as separate invasions from a common in-t determining cause. The symptoms offer marked

Bronchitis

In taking up this important disease, it is first necessary to classify it under various heads. We will therefore will divide it into 1st Acute. 2nd Sub-acute. 3rd Chronic. It would be proper first, before taking up the different divisions, to give a short clinical history, in general of the disease as a whole. But more especially the acute form. Acute Bronchitis is generally preceded by inflammation of the mucous membrane of the nasal passages, or coryza, the inflammation commences in the nasal tract and travels down, either affecting, or passing by,

Circulo Bronchiale

M. D. E. Cope

1886

Acute Bronchitis

Before treating of acute bronchitis it will be necessary to make a few remarks on the nature of bronchitis generally.

Bronchitis means an inflammation of the lining membrane of the bronchial tubes. There are several classifications of the different types of the disease but the one we

think the most simple
is the one dividing it
into four types viz:
Acute.
Chronic
Capillary and
Tonsils
I hardly come within
the scope of this work
to describe each of these
separately for I can
only indicate their char-
acter
Whenever any one of the
types appear. It is either
primary or idiopathic or
it is secondary or result-

[illegible] as a complication of [illegible] the disease [illegible] in [illegible].

[illegible]

[illegible]

[illegible] only as affecting discharge above chest tube.

Acute bronchitis begins as does an inflammation anywhere, shows hyperemia of the part affected here it is chronic consequently being the bronchial tubes.

Hyperemia [illegible]

be uniform in all parts of all the tubes affected or it may be more marked in patches.

The mucous membrane becomes swollen and softened.

Post mortem appearances do not correspond at all to the ante mortem conditions, for the redness seen during life may entirely disappear after death.

Sputa at first consists of a viscid mucous but later on the disease

It is yellow and mixed with tracers but the presence of both organs shows corpuscles.
After death a coating of mucus is found upon the inflamed mucous membrane. When the bronchitis is primary the tubes on each side are equally affected.

Clinical History

The attack is generally preceded by a catarrh seated in the more superficial air

passages. This catarrh generally commences in the nasal mucous membrane and passing downwards may or may not affect the pharynx and larynx, but takes up its seat in the mucous membrane of the bronchial tubes, thence it extends to the submucous tissue only very rarely. Duration — 1 from one to two or three weeks the period from appearance of the coryza

until the bronchitis is set up varies from a few hours until a few days.
Patient will complain of pain behind the sternum especially when the cough, painful sensations of soreness.
The patient does not always perceive a marked chill at the onset but there are chilly sensations alternated by excessive heat of the body.
Sputum is not profuse but although it is also

[illegible]
[illegible] impaired, and the patient complains of being in a state of general malaise.
Cough is at first dry, but soon becomes moist and afterwards expectoration is abundant.
Bronchitis is more often accompanied by much debility, and often the patient does not take to bed at all.
Treatment
[illegible]

[illegible]

[illegible] ate [illegible]

[illegible], this would

seem to indicate that

cold paste comes of

[illegible], this [illegible] only

[illegible] [illegible]

[illegible] [illegible]

[illegible] [illegible]

cold do not have bron-
chitis and those who do have
it have often not been
exposed to any excessive
cold at all. Those who
develope that cough
brought to bear upon
it seems that
the most frequent cause
is exposure of only a
part of the body to change
of temperature, such as
sitting by a crack in a
window which allows
a draught to blow on
one side or any other
part. It must be con-

[illegible] appear to be well understood but it may be said to be due to some atmospherical change
Cold and temperate climates are more infected with bronchitis than are the tropical climates, and in the former climates it is seen more in the Autumn and Spring than in summer and and winter
Secondary bronchitis

may be caused by rubbish, and so hasten the cause of it when it sleeps to cause fever of the lungs.

Typhoid fever is often complicated by chronic bronchitis.

Acute bronchitis may have a traumatic origin such as inhalation of irritating gases as for instance inhalation of chlorine or the fumes of sulphuric acid.

Persons who have much in the open air are subject

liable to attack of the diseases to which they spend most of their time in warmhouses. It is a noticeable fact that hunters, soldiers, surveyors &c who live in camps are particularly free from them sickness but as soon as they resume their life in warmhouses again they are often attacked with bronchitis & degrees.

The two most important diseases

from which bronchitis
must be diagnosed
are acute lobar pneu-
monia and pleuritis
The clinical history
will have a good bear-
ing in most instances.
The diagnosis
in bronchitis is fair
as not lancinating and
is substernal.
Expectoration is not
rusty and if bloody
at all it is streaks
of blood.
Breathing is not vesic-
ular nor are there any

Diagnosis:

The attack is generally preceded by coryza if it be bronchitis but so if it is acute lobar pneumonia or pleurisy. Percussion resonance is the same in this disease as in health, and vocal resonance is also unaffected.

Prognosis —

In middle life is very favorable, but in the very young and in the old it is more dangerous

Treatment —

Hygienic treatment is all that will be necessary in many cases. When the case does not yield readily to hygienic measures the patient should be put to bed in a warm room in which steam is being constantly generated and kept there for a few days.

During this treatment the patient should have hot foot baths at night

and a Dover's powder.
Inhalations of warm vapors and sprays will be found very beneficial.
Counter irritation not carried to blistering will give relief when there is much pain.
Opiates are not indicated in the first stage of the disease. When the disease is tending towards chronicity tonics are necessary such as quinine cod liver oil iron and so forth

A Thesis on Scarlatina

By

J. J. Best

of

Virginia.

Feb. 15th 1886.

Scarlatina.

Being deeply sensible of the fact that this disease furnishes the caption for a goodly number of theses written by medical students: yet, also, am I deeply sensible of the fact that it is a common, and in its grave form - one of the most malignant and dangerous diseases that the practitioner has to encounter. Bearing this in memory then - it is essential that he should be thoroughly acquainted with the disease in all its stages and forms - so that at a moments warning he may possibly abort its progress or alleviate it to that degree that his patient may still live. For this reason I adopt it as the subject of my thesis.

<u>Definition</u> -. Scarlatina is an epidemic and contagious eruptive fever, characterized by

a scarlet rash, which appears on the first or second day of the disease and ends usually on the sixth or seventh day — or in some rare cases as late as the tenth; also by simultaneous inflammation of the tonsils — and of the mucous membrane of the mouth and pharynx, and which is followed by desquamation. Scarlatina is remarkable for the wide diversity which it presents as regards symptoms and fatality. It has been divided into several varieties based on differences in symptomatic characters and intensity. At the present time three varieties are recognized by writers, viz: Scarlatina Simplex — Scarlatina Anginosa and Scarlatina Maligna. These varieties are widely different in respect of gravity and distinctive characters: yet they are not distinct diseases: essentially they are identical.

Anatomical Lesions—. The leading anatomical characters of this affection are the eruption on the surface and the morbid appearance in the throat. The eruption sometimes disappears entirely after death: and occasionally assumes a deep livid or purple appearance. The epidermis is generally loosened upon the integument. so as to be peeled off with great facility. The most important lesions, and those which seem to belong to the disease independent of all complications - are the altered conditions of the blood - and congestion of the different parts of the body - particularly the brain - serous membranes - kidneys - spleen - glands of Peyer and the intestinal follicles. Hyperaemia, with more or less swelling of the cutis is the causes of the eruption. The respiratory organs are usually

healthy, with the exception of congestion and engorgement. There is congestion of the subepithelial layers - with excessive formation and subsequent desquamation of the epithelium. According to some writers, the entire gastro-intestinal mucous membrane is affected in many cases of this disease. In the mildest form of scarlatinal sore throat, the mucous membrane covering the tonsils - soft palate - and pharynx - is reddened and slightly swollen. The tonsils are frequently enlarged. Sometimes a phlegmonous inflammation of the tonsils - soft palate and pharynx - may occur in severe cases of this disease. The swelling in such cases is extreme. The mucous and submucous layers become infiltrated with pus cells. In such cases abscesses generally form in the tonsils. In some epidemics of scarlet-

fever, a diphtheritic inflammation of the throat frequently occurs. The fibrinous exudation begins on the tonsils and extends to the soft palate and pharynx. The inflammatory process may be propagated from the pharynx along the eustachian tubes to the mucous membrane of the middle ear. Suppuration, with perforation of the tympanum may occur which ultimately results in deafness. Peyer's and Brunner's glands are often moderately enlarged and sometimes reddened and softened. In a few cases the mesenteric glands are increased in size and inflamed. The spleen is redder than normal or softened and enlarged. The kidneys are healthy except a slight degree of congestion, unless the case has been complicated with dropsy. Under these circumstances they usually present the

characteristic lesions of tubal nephritis. The heart occasionally presents the results of inflammation of its lining membrane: and in some cases its cavities contain firm white autimortem clots. The blood shows different appearances in different cases. It is viscid or serous - dark colored or light, and fluid or coagulated - the clots being of variable and color and density. The proportion of its constituent elements is changed. The fibrin maintains its relation or is slightly increased whilst the globules are increased. This increase in the proportion of fibrin may be the cause of the fibrinous deposits - which are occasionally found in the cavities of the heart.

<u>Clinical History</u>—. There are three stages, viz: I - <u>Stage of Invasion</u> - II - <u>Stage of Eruption</u> - III - <u>Stage of Desquamation</u>.

I- Stage of Invasion -. The onset of mild cases of scarlatina is generally sudden. Occasionally a chill more or less pronounced - ushers in the attack. Vomiting is an early symptom, in a proportion of cases - all accompanied with diarrhoea. As a rule the fever is intense on the first day - and runs higher than in any of the eruptive fevers. There is complete anorexia: the thirst is acute: the bowels are usually in their natural condition or slightly constipated. The child is quiet and dull or else restless and irritable, and sometimes there is delirium: the face is generally flushed - and the eyes injected. In mild cases the symptoms are so slight that the patient does not take to bed. In grave cases of this disease the symptoms are of the most virulent character. The onset is sudden. The child passes within a few hours from a state of apparent health into one

of the extremest danger. Most of the cases begin with violent fever and great depression of strength. The pulse soon becomes very rapid - rising to 140 or 180 or frequently so rapid that it cannot be counted. The skin is dry - in some parts burning hot - in others cool or even cold. Generally there is nausea and vomiting and these may be violent and constant. Delirium often exists from the first or else there is drowsiness or dullness of intelligence - merging gradually into coma. In the most violent cases, the stupor and coma alternate with convulsions - which may prove fatal in from eighteen to thirty-six hours. When a case of this kind lasts over two or three days - the violence of the nervous system subsides: the convulsions cease: the delirium is less violent: the coma gives way to drowsiness and the patient again becomes rational:

all the grave symptoms may subside and the stage of eruption assume a more favorable appearance. The period of incubation in Scarlatina is shorter than in any other disease. The average duration of this stage is about twenty-four hours. Sometimes it is much shorter - occasionally longer. The eruption usually makes its appearance on the second day. In mild cases - so rapid is this stage and so mild the symptoms - that in a majority of the cases, the stage of eruption makes its appearance before the physician is consulted.

II - Stage of Eruption -

The eruption appears early in the attack and is deeper where the skin is finer. It generally appears first on the neck - then it extends rapidly over the entire surface. It is a very arbitrable fact and a peculiarity - that an eruption appears around the mouth - the nose and the orbits of the

eyes - and but very little over the forehead. The erup-
tion continues to grow in intensity and extent un-
til the 3rd or 4th day. It appears first in minute dark
-red points upon a rose-colored surface, forming
patches of irregular shape and considerable size
on a level with the skin - disappearing upon pres-
sure: divided at first by portions of healthy
skin - but running rapidly together - giving to large
portions of the surface a uniform scarlet color.
The eruption is not generally equally diffused
over the whole body - but is more marked upon
one portion than another. The redness is most
vivid and remains longest where the skin is most
delicate - as on the abdomen - thighs and inner
surfaces of the arms - axilla and about the artic-
ulations. The surface of the eruption is smooth
and warm to the touch. The redness is of the ver-

million or scarlet color, and is not uniform like erysipelatous redness. It momentarily disappears on pressure, and if the nail be drawn firmly over the skin where the eruption is a white line is produced, which lasts for a short time and then passes away. The eruption usually reaches its height on the 4th day and remains stationary for a while, and by the seventh day nearly all traces of the eruption will have disappeared. The symptoms which preceded the eruption do not usually subside on its appearance. The tongue early in the disease is coated. While the coating remains, frequently the papillae projecting through it have the appearance of numerous red points. In the progress of the disease this coating exfoliates, leaving the surface of the tongue clean and reddened: the papillae being enlarged, leaving the appearance

like that of a ripe strawberry. This Strawberry like tongue is a pathognomonic symptom and is peculiar to the disease. It is not uniformly present. The febrile movement continues unabated, as a rule it increases after the appearance of the eruption. The pulse is full, strong, and frequent - running up very soon after the onset to 120 – 130 and often to 160. This frequency of the pulse is a most marked symptom of the disease. The frequent pulse and increased heat of the skin are more marked in this than in any other of the fevers. The skin is burning hot and dry and loses its usual softness and suppleness. The thermometer in the axilla shows a decided increase in temperature ranging from 103° to 105° Fah. and in grave cases often higher. The expression of the face is natural - the eye is often animated and the respiration is easy and natural, though sometimes

when the fever is violent - it is quickened. During the stage of eruption - anorexia continues and vomiting is rarely troublesome in mild cases: constipation is present in some cases and in others diarrhoea. During this stage the urine often presents the ordinary febrile character: it is diminished in quantity - often of high color, though the frequent is not increased. In about one-seventh of the cases during this stage, the urine will contain a certain amount of albuminuria. During the eruption the nostrils are either dry and incrusted or there is some coryza. The strength of the child is reduced for the time - but there are no signs of prostration and the decubitus is indifferent. There is almost always more or less disorder of the nervous system. The duration of this stage in the majority of cases is from 4 to 6 days: it is sometimes shorter. Frequently it is

prolonged to 8 or 10 days and occasionally for a longer period.

III - Stage of Desquamation.

Desquamation is one of the regular orders of scaly fever. The commencement of desquamation marks the beginning of this stage. It usually begins with the disappearance of the eruption and sometimes before. The extent of desquamation is independent upon the intensity and diffusion of the eruption. The cuticle is exfoliated either in the form of branny scales - called furfuraceous desquamation - or in pieces of epidermis of considerable size. Sometimes the epidermis of the hands and feet exfoliate in one mass - like a glove or shoe. In the majority of cases the desquamation commences on the face and neck. It then extends over the whole body and becomes general. The whole process generally occupies from 10 to 12 days - and in many cases it con-

times even longer. It is generally accompanied by roughness and dryness, and considerable itching and irritation of the skin. It not infrequently the surface under the exfoliation is left tender and irritable for sometimes afterwards. During this stage the urine becomes abundant, pale - of neutral or faintly acid reaction - and in some cases deficient in phosphoric acid. Albuminuria is more frequently observed in this stage than during the stage of eruption. The presence of albumen in this stage - as in the stage of eruption, may or may not - be indicative of some important renal complication.

Grave Cases.

In the foregoing description of this disease it applies to cases of a mild degree or not of extremely severe danger. In the grave form the general symptoms are more severe than in the mild cases. It occasionally happens that the case promises to be mild, but then

suddenly assumes the more threatening features of a grave form. The fever is usually intense - the pulse full and strong - soon rising to 140 or even as high as 170 per minute: the skin is intensely hot and dry: great restlessness, delirium coma and occasionally convulsions, denoting the severity of the disease. The respiration is quickened - and in many cases is laborious and difficult - the result of throat affection. In some cases - a loud - characteristic gurgling is heard in the throat - while the child is sleeping. This is due to a tenacious secretion in the fauces. The voice is hoarse - guttural and often a whispering. The face is deeply flushed at first, and the expression anxious. If no improvement takes place in several days - the case assumes a more threatening aspect. In such cases the disease is truly malignant and death may take place in one or two days - or sometimes even within a

few hours from the attack. Cases of this kind are liable to occur in certain epidemics. The gravity in such cases is due to an unusual intensity of the essential morbid conditions which constitute the disease and not to any complications.

Complications and Sequelae. — The complications and sequelae of scarlatina are many and some of them are of grave omen. Convulsions — coma and delirium may be developed as effects of uraemia. Kidney affections form an important complication of a certain proportion of cases of scarlet fever. Generally but not always the urine is highly albuminous. The presence of tube casts — with white or red corpuscles in the urine is more significant of renal disease than albumen. Clinical facts clearly show that scarlatina involves a special tendency to renal disease, not only as a sequel, but also as a concomitant. It is a suppo-

-sition that the lining membrane of the secreting tubes of the Kidneys take on a morbid condition similar to that of the mucous membrane of the pharynx, constituting a local affection - serious in proportion as the urine is not secreted properly. When dropsy appears as a sequel to scarlatina the urine will be found to present all the characters present in acute Bright's disease. The exciting cause of the dropsy is generally conceded to be cold - contracted usually by exposure to air or moisture at too early a period. During the month of April last - a little German child was admitted to the Maryland University Hospital from off one of the German emigrant vessels - with a history of having scarlatina. Upon Examination by Prof. Edmund Atkinson - the child was found to be in a convalescent state of the scarlatina - and was found to be suffering

from general appearance. In a few days the child died of Bright's disease as a sequelae to the scarlatina. Being present at the post-mortem examination I noted the following points. There was double hydrothorax: the spleen was considerably enlarged: the kidneys violently congested so violently congested even they that no parenchymatous changes had taken place. A microscopic examination of the urine revealed tube casts - numbers of blood cells and also uric acid cells. Diarrhoea is not an uncommon accident in this disease. It generally depends on simple functional derangement of the bowels. In some cases it is so severe or so long continued as to constitute a serious complication. Otorrhoea is not an infrequent sequel, and often following angina and due to the extension of inflammation up the Eustachian

tube, may be followed by permanent deafness - necrosis of the temporal bone, facial paralysis and even abscess of the brain. Hemorrhages from various situations are of frequent occurrence in some cases. Haematuria occurs in connection with renal diseases. Sometimes it is very pro[illegible] at other times not so much so. Prof. Atkinson asserts that it is a singular fact that in scarlatina the only free hemorrhage that occurs is from the kidneys. Diphtheria is a common complication of scarlatina - as also measles or v[illegible]ola, and gangrenous of the skin. Prof. W[illegible] S. Howard asserts that rheumatism is one of the most common complications of scarlatina. This is also the opinion of Prof. Atkinson. The latter gentleman states that a child who has had scarlatina is very apt to have acute rheumatism, and often when a child has had these two affections,

it is very apt to have chorea. He claims the cause of this is not exactly known. Bronchitis and Pneumonia are rare complications. Pleurisy is also a rare complication. Prof. Wm. T. Howard states that if albuminous nephritis occur at all as a regular - it will occur during the first six weeks after the convalescence of scarlatina. The most common symptoms is general anasarca and albuminuria. It is Prof. Howards belief that if the patient is properly cared for in the latter stages of the disease, and that if the patient be carefully guarded and protected from cold or moist air - or exposure of any kind during the convalescent period, that in the majority of cases albuminous nephritis will not occur at all. Tuberculosis is not nearly as apt to occur - after scarlatina as after rubeola or typhoid fever. <u>Causation</u> -. For scarlatina there existed quite a diversity of opinion as to the mina-

diate cause of scarlatina: but now - at the present day nearly all diversities of opinion on the subject have vanished - and the majority of writers now with one accord attribute the immediate and direct cause to a special contagium. This contagium is as efficient from mild as from grave cases. This is a stumbling block to many persons. They think that the mild cases differ essentially from the grave - and hence cannot be as serious in its effects. This is a grave mistake. The same contagium that causes a mild case will also cause a grave case - there is not a special contagium for the mild cases and a specific contagium for grave cases. Hence then the disease may be contracted from a mild case as well as from a severe one. It is the common belief that scarlatina refers to the mild cases and scarlet fever the grave cases. This is an error - the two names apply essen-

Sir Thomas Watson says "you will often hear mamma's exclaim "Oh, my children have not got the scarlet - fever but only the scarlatina.

Lisally to the same disease, and physicians should take pains to correct this error. The contagium is contained in emanations from the body - probably in both the expired breath and the cutaneous exhalations, hence the atmosphere around the patient is infected. That the disease may be communicated by fomites - cannot be doubted. Prof. Austin Flint asserts that the contagium may be carried from place to place in the clothes of physicians - nurses and others. The disease is often diffused in this way. Facts prove that the contagium adheres to material substances and preserves its morbific effects for a long time. The period of incubation is shorter than in other contagious eruptive diseases. Its duration varies from 24 hours to six or more days. The disease prevails at all seasons of the year, but is most common in the Spring

and summer, and next in the autumn. It rarely occurs but once in the same individual; but that it does sometimes, has been proven by several authors. Secondary attacks are rarely fatal. Age yields a decided influence in this disease. It is most common between the ages of 3 and 10 years. Persons under two and over forty are not exempt from it. Several cases are on record where it occurred during extreme life. Occasionally persons who have undergone surgical operations are attacked with a scarlatinous rash. Diagnosis — It is impossible to distinguish scarlatina from the other eruptive fevers by the symptoms which precede the eruption. The only signs upon which a diagnosis might possibly be made at that time are the great frequency of the pulse — which is characteristic of the disease — a little soreness of the throat, and the prevalence of

the disease in the community. But even these are doubtful and cannot be spoken of with absolute certainty. After the eruption the following are the chief diagnostic points: the shortness of the stage of invasion - the intensity of the fever - the eruption in the throat before the cutaneous eruption - the rapid diffusion of the eruption over the surface and its bright scarlet color - and the increase of fever when the eruption begins. These are diagnostic features which can be positively relied upon, as distinctive of the other eruptive fevers. Scarlatina is distinguished from measles - by the great differences in their stages of invasion - in their course, and in the eruption of the two affections. The prodromic stage in scarlatina rarely ever lasts longer than 24 hours, and in many cases much less - whilst in measles it almost always lasts from 3 to 4 days. In scarlatina the rash appears

suddenly - and in many cases spreads over the entire body in one day; in measles it begins on the face and gradually extends over the body - not making its appearance in some portions for several days. The color of the two eruptions is entirely different. The eruption of measles is darker - of a raspberry color, whilst that of scarlatina is a bright scarlet color. Soreness of the throat is not characteristic of measles - whilst it is of scarlatina. In very mild cases of scarlatina with but slight eruption and scarcely any sore throat the diagnosis is then confounded with roseola. The most important differential symptoms are the tint of the eruption - the roseola being a rose color; the characters of the eruption being more regular in shape - but in smaller patches in roseola than in scarlatina - and what is considered by the most important of all - is a marked smaller degree of fever.

rosacea, in which the pulse is scarcely above its normal beat. Scarlatina anginosa and diphtheria may sometimes be confounded. Prognosis —. Prof Flint Sr, says "there is, perhaps, no disease in the nosology which presents in different cases, wider extremes, as regards gravity, than scarlatina. In mild cases the prognosis is generally good. The ratio of fatal cases varies much at different times and places. In some seasons the disease is very mild - in others it is very grave. Aside from cases of intense gravity from the onset, the next greatest danger depends upon some complication which is liable to occur. The prognosis depends upon the character of the epidemic prevailing at the time, and also upon the nature of the case. Mild and regular cases are rarely fatal - Sydenham says they are "fatal only through the officiousness of the doctor". Severe cases of scarlatina are always to

be looked upon as exceedingly dang[illegible]. The prognosis is always unfavorable in cases where the throat is unusually severely affected. If laryngitis follow - a fatal result is to be expected. Gangrene of the throat and mouth may occur - in such cases it is an exception. Uraemic convulsions involve great danger. The urine should be examined daily. The presence of tube casts or albumen should excite suspicion and be watched carefully.

Age - sex - nor social position influence the prognosis. A child of feable constitution is as apt to have a grave case than a stout, robust child. Treatment:- Scarlatina simplex rarely requires anything more than confinement to the house: the careful observance of the anti-phlogistic regimen in regard to diet: and the regulation of the bowels. When the physician first makes his diagnosis as scarlet fever, then he should immediately look for a prophylactic for the rest of the family. Dr J. Wm.

T. Howard claims isolation to be the only good prophylactic. In all cases of scarlet fever — whether mild or severe — the strictest attention should be paid to the hygienic condition of the patient and the surroundings. The room in which the child is placed should be large and well ventilated. The temperature of the room should range from 68° to 70° Fah. in the early stages of the disease; but should the fever become intense and the child complain of great heat, then the temperature may be lowered to 65° or even to 62° Fah. One of the most important points in the treatment of scarlatina, is undoubtedly the management of the patient during the convalescence, and especially during the desquamation stage. It is during this stage that the child is most likely to develop dropsies — which are the most dangerous accidents to which the child is exposed. Mild cases of scarlatina call for no special active treatment. Keep the room well ventilated — ice-water, and draughts of

Lemonade - orangeade - and such things will often suffice. If the skin is healed, and pulse frequent, the patient should be confined to bed and kept there for several days. Sir Thomas Watson says "if the heat of the surface be very great and distressing, I should certainly recommend the cold affusion, but cold or tepid sponging will be very refreshing and beneficial." According to Prof. Howard when the temperature runs up to 104° Fah. baths should be used, at a temperature of 94° to 98° Fah. then rub the surface dry, after which rub over the body glycerine, and then put to bed. If the temperature runs to 105° Fah. Quinine should be given - in five grain doses - 3 times daily to a child five years old. If the pulse is strong - to a child the same age you may give a drop of Tinct Aconit radix - in an ounce of water. Let them eat as much ice as they want - ice

internally and moist externally. If the bowels are costive give a simple enema. Keep the patient on a strictly liquid diet for the first five or six days. In grave cases in which disorders of the nervous system in the form of convulsions, tremors or rigidity, retraction of the head - delirium - stupor - coma may occur - more active treatment is required. In such cases as these - and more especially when they occur in young children - the mortality is very great indeed. In such cases, death usually carries off its victim in from 6 to 48 hours. In all these malignant cases in which there is a tendency to death by asthenia - stimulating remedies must be the chief reliance. Alcohol is indicated when the pulse is feeble and frequent and when there is general prostration. In the forms of scarlatina anginosa - stimulating remedies must be continued, and in addition

remedies must be addressed to the throat itself. Of these Chlorate of Potassa is highly recommended. In this connection Sir Thomas Watson recommends very highly the chlorine inhalation. The use of caustic applications are of doubtful. Prof Howard says:- "Never put a stimulating blister or liniment on the outside of the throat." No bleeding and no leeching must be done in such cases. No douche should be used in their place use the spray. If the patient is not too young antiseptic applications by gargling are recommended. A diluted solution of chlorinated soda may be used for this purpose. Permanganate of potassa - tannic acid - borate of soda - carbolic acid and saligelic acid are also much used in this connection. The child should be given plenty of cracked ice milk to drink, as this heads the list of all diet for the sick. If there is much sickness at the sto-

much given calomel - as it is one of the best known remedies for quieting the stomach. Under this treatment if there continues to be much restlessness - mild anodynes may be employed. If there be diarrhoea - the cause should be first sought - and if found due to uraemia - it should be left alone: if not due to uraemia - then it may be checked by giving a mixture of deodorized tincture of opium - sub-nitrate of Bismuth and chalk mixture. If uraemia is present fomentations are to be applied over the skin - the bowels are to be kept open by mild saline laxatives - and later a diaphoretic is found to be useful. It is claimed by some writers that belladonna exerts a protecting influence upon the body against scarlatina. Hahnemann - the father of Homoeopathy (and much injury to mankind), was the first to make this assertion

tion. It is claimed that belladonna given in small doses often causes a rash similar to that of scarlet fever rash. Many authors claim that there can be no harm in trying the belladonna treatment for a protective influence. We do not believe that belladonna exerts any such influence. We believe that isolation is the best preventative. Whether the belladonna treatment does exert any such influence and whether any real good is derived from it – the tongues of the great authors remain as useless as thoughts they were statutes.

J. J. Best
Winchester.
Virginia.

Dec. 30th 1885.

DISEASES OF THE MAXILLARY SINUS.

BY

JAS. EDWIN HARRIS. D.D.S.

1886

Diseases of the Maxillary Sinus.

The maxillary sinus, or antrum of Highmore, is a cavity situated in the substance of the superior maxillary bone, which communicates with the middle meatus of the nose. It is lined by a continuation of the Schneiderian membrane. In it we may expect to find all the diseases which are known to beset the mucous membrane in other parts of the body.

Disease of this cavity are frequently found in connection

with irregular dentition and most
often in females who have passed
the middle age, for it is then
that we most commonly meet
with decayed and sulkers teeth,
which are prominent causes
of trouble in the autumn-
We know that the most ac-
cessible entrance to the cu-
tanous is through the orifice
of the bicuspid root of the 1st
or 2nd molar tooth — for the roots
of these teeth often divide into
the cavity — and we can easily
see what disease of the teeth
may be transmitted to the
nervous system — among the

causes of autumn troubles are
[illegible], [illegible], [illegible]
irritable parts of [illegible], [illegible]
about the [illegible] [illegible] [illegible]
[illegible] [illegible] such constitution-
al troubles are [illegible] [illegible]
[illegible] to disease [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
in the autumn, the [illegible] [illegible]
the secondary [illegible] [illegible] [illegible]
[illegible], but this is [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] that we [illegible] the
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] of [illegible]

the disease is confined to these parts. Hernia has a peculiar pathological relation to the mistress.

In looking for the cause of autumn fevers, we must remember remember the importance of some careful examining the teeth. If the molar be defective, it would be well to make an incision and a round of boring, quite certain that there is yet an imbedded tooth or root, which may produce irritation. Another same tooth may be the primary cause, and be an accew

burrowing through the bone.
Should the alveolus have its
complement of apparently sound
teeth, care & thought examin-
ation to ascertain the pres-
ence or exclude the possibil-
ity of a dead tooth. This con-
dition may be diagnosed by
taking when the tooth to test
feel the warmth or by re-
flecting light in the teeth
to recognize any difference in
color or appearance of one
from the other. And tested
by dashing cold water from
a syringe to detect any lesi-
ion sensitiveness.

A condition of the uterus frequently met with is mucoid enlargement, due to catarrh of the Schneirian membrane and is recognized by increased secretion, but if of sufficient enlargement should to close the natural outlet, causing the varied symptoms due to the cavity filled with fluid, causing the pain to become molten, which is accompanied by pain and a sense of weight and bearing may result.

Diseases of the uterus is not a rule easily diagnosed;

and often be a simple question, which it may be difficult for the patient, the diagnosis can only be made by careful examination and by the help of disease. It is to ascertain whether the exact nature of the trouble is often impossible. As to diagnosis between mucous and secreting tumors, cancer and abscess.

Injury is now recognized as one of the most frequent diseases of this kind and is generally secondary to suppurative inflammation. It is clear that to this cause we are likely

to find an inflammatory condition of the surrounding tissues with more or less disturbance of the circulation. The natural drainage of the cavity may be obstructed by concretions thus preventing escape of the fluid which will collect and consequently distend the parts to such an extent as to materially interfere with vision and cause much distress. The sac and cavity is finally ruptured, which is most often and fortunately the relaxed wall, owing to gravitation of the fluid

The veins were in the middle of the neck, the middle vein of the neck, the middle vein of the neck, the flow of the blood, the hard points of the carotid.

The drains above mentioned, may be united necessarily by one of a lancinating or dull pain deep-seated character. The tumefaction, pain, redness and tenderness of the chest, the fever, indicating of the formation of pus or a more chronic condition. When the inflammation and tumefaction

[illegible]
[illegible]
[illegible]

the pain is again experienced
under the same in re-established.
On this time the disease
not become chronic, the
patient unconscious. Discharge-
ability discharged in unconscious
to both the patient and the
nurse. Time, for, in this situ-
ation abnormal sensations in
the rectum and anus are
become more vivid. The
disease does not seem abate,
it may soon grind downward
by causing larger in time.
Auto cancer has been known
to develop as a result
of irritation in the anus.

[illegible]

[illegible]

[illegible]

this pitiful and determined pa-
ness will not induce an
opening which, when in
the face leaves a more
unsightly and rugged pa-
which is most dangerous,
the loss of an eye may be
threatened. Such ma-
lignant and non-malignant
tumors are found in this
cavity and when they do
exist should receive more
than attention, for the ma-
lignant growth rapidly in-
vades the surrounding parts
and the consequence may
prove quite serious, leading

much deformity and invalidism remained. Still, in the second and third decades of the last century, the treatment was not important results.

Treatment.

When the patient is the result of syphilitic rachitis, or some other chronic constitutional treatment must be directed, with the addition of local antiseptics. The constitution of the patient must receive attention, given good food, with tonics and other treatment as indicated.

Some local remedies can be employed on passing, must be established, which may be accomplished by employing the natural passing of water in very boiling, extracting the pain or relieving the affected side, by bringing a warm reference to the bowels which may be in an uneasy disturbed or deranged. The patient is the best judge of the first 24 hours being the best adapted for the escape of blood and application of remedies.

A perineal enlarger of the opening thus made is even sufficiently large to admit the introduction of the fingers. A lancet-shaped knife be inserted through the opening to cut the septum under cover of fluid but prevent the injurious from flowing. The shaft is made of gold, silver, or platinum; the latter being preferable on account of its pliability and easy adaptation. The tube must be ligatured to an adjacent tort. In pregnancy

Having been poured, fluid water injection should be made to thoroughly wash the cavity. Injection water treatment is contraindicated.
Care must be taken to prevent any particles of food from getting into the abscess or joint cavity. Substances quite and excite irritation and inflammation and serve to counteract the effects of treatment.
Although antiseptic stimulating and astringent washes are absolutely essential, it should also be borne

in which the aluminium
is given off as vapor.

A mixture containing per-
centages of starch in an
especially powerful, as well
also stimulating injection
of the sulphate or chloride
of zinc is a very valuable
adjunct in treatment of
infectious vaginal discharges.
Solutions of tannic acid
of glycerine and tannin and al-
cohol are also efficacious
and a douche of solutions of alcohol
and chloride of zinc must
also be remembered as
especially valuable.

Chloride of Lime is most beneficial when degenerating ulcers are produced from retained secretions.

A solution of Chloride of Lime water is a very beneficial agent in all diseases of mucous membranes, being of itself without perceptible odor and at the same time both antiseptic and disinfectant, besides leaving an agreeable and soothing sensation to the patient. Add grain of the Chloral Hydrate to an ounce of water, as a

rules in sufficiently strong
for most cases. This agent
has certainly a decided
good reputation and an antici-
pation of a direction of the
moral language.

Finally I would recommend
the reader to Humbert's Lecture
of Dr. Irwin, in which an ex-
cellent outline of this stim-
ulating remedy. It can be
used as an injection either
full strength or diluted and
has been employed with
marked good results.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] of [illegible] children [illegible]

[illegible] people.

[illegible]

[illegible] believe [illegible] the [illegible] that the [illegible] [illegible] [illegible]

incubative stage.

[illegible]

[illegible] [illegible] [illegible] [

As has been stated, above, there is a common belief that pneumonia is caused by exposure to [illegible] and [illegible] by exposure [illegible] result [illegible] the body is [illegible] [illegible] [illegible]

[illegible] pneumonia is divided into three stages, as follows: The stage of congestion, the stage of red hepatization, the stage of gray hepatization, the stage of resolution, [illegible] stage.

In the inflammatory stage, or stage of congestion, the portions of the lungs affected have a bright scarlet appearance, as [illegible] from [illegible] lungs, [illegible] and [illegible] are [illegible] in the [illegible] lungs. Dispersed throughout the [illegible] are [illegible] [illegible].

Complexion, the chief. The [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
the [illegible] [illegible]. Diseases of
[illegible] the [illegible] [illegible] [illegible] [illegible]
[illegible] which [illegible] [illegible] [illegible] [illegible]
[illegible] with [illegible]. The [illegible] [illegible]
the [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[

Slide [illegible] — Scraped, [illegible] resembles liver tissue.

[illegible] specimen [illegible] the [illegible] tapes [illegible]

[illegible]

[illegible] of

water and will not exfoliate when

[illegible]

[illegible]

[illegible]

end of the second stage, instead of

[illegible] — This
stage, [illegible] follows a fresh leaf
of red hepatization and no [illegible] and another begins,
[illegible]
[illegible]
[illegible]
color, large numbers of pus cells [illegible]
[illegible] undergoes fatty degeneration [illegible]
[illegible]
[illegible]
inflamed lung will be found invaded
[illegible] bacilli [illegible]
[illegible] tubercle

[illegible]

expeditiously with which the lung clears
itself of the foul effluvia,
[illegible] gases, gases conjoined
[illegible] rigidly and un-
[illegible]
[illegible]
[illegible]
[illegible] the lungs [illegible]
[illegible] healthy condition.

Transformation.—[illegible] cases
[illegible] the epithelial layers
[illegible] beyond the stage of mere
[illegible] the complete [illegible] of
transformation. [illegible]

[illegible] rupture and two or three brothers legitimate. [illegible] there have the third [illegible] termination, or the breast [illegible] cavity be formed.

[illegible]

[illegible] pleural cavity and pleurisy occur, or [illegible] effusion, or [illegible]

Generally – [illegible] these [illegible] of [illegible]

[illegible]

of the exudation, preparatory to its
calcification is arrested, the tissues are
[illegible] ment. The
[illegible]
[illegible] D.
[illegible]
Recent [illegible] to [illegible]
degree; the exudation is partly drif-
[illegible]
[illegible] the [illegible]
D. [illegible] cases, [illegible]
[illegible] the latter condition occurs [illegible]
few [illegible] life, [illegible]
[illegible] the [illegible]

[illegible]

History — All portions of the [illegible] which have been [illegible] by the [illegible]. Statistics [illegible] [illegible] according to the statistics of Jorgensen, the [illegible] [illegible] 53.7 percent, [illegible] 5.15 [illegible] [illegible] 8.7 percent. [illegible]

[illegible] of left, the upper lobe of

[illegible] of [illegible] cases. [illegible]

[illegible] . We also [illegible]

[illegible] cases [illegible], they of course differ

in length in different cases.

[illegible]

[illegible]

f[illegible]rable cases may terminate in

[illegible]

[illegible]

[illegible]

the most common way. The appeari

[illegible]

[illegible], dull pain in back and limbs

[illegible] rise. It

[illegible]

this occurs in more than 97 percent

[illegible]

frequently lasting two or three hours.

[illegible]

[illegible] ed in by first such symptoms

[illegible]

in by [illegible] apex of the [illegible]

[illegible]

[illegible] at symptoms are, after chill, a

[illegible]

far out of proportion. It

of 80 or 85 permissible; this, of course,

affected, than where the

one, or at most two bolts are

attack. When a part of the energy is

[illegible] the lungs, but it also [illegible]
as [illegible] one [illegible] it [illegible]
the center of a lobule. It, however, is
of a stabbing character, and increased on
respiration [illegible]
[illegible]
[illegible]
[

characteristic brick-dust hue, and is
[illegible]
alcohol. In some cases there will
[illegible]

more lived in proportion to the severity of the disease, and amount of lung-

the nose. It is usually most marked

[illegible]

[illegible]

Les [illegible] quelque [illegible]
103° à 105° F. Et sous l'eau

place on the fifth, sixth, or seventh day;
[illegible] occurs on an odd day. The
temperature may have been 103° or 104°
[illegible]
[illegible] seen [illegible]
is more quadrate, and prominent, and is
then called the [illegible]. When the point
is [illegible] and [illegible] or
[illegible] [illegible] [illegible]
temperature [illegible] [illegible]
[illegible] indicates [illegible] transu
formation. [illegible]
intermittent, it is an unfavorable

[illegible]

[illegible]

tendinum, are not usual, except in patients

[illegible] to

[illegible] and

[illegible]

[illegible]

[illegible]

up to the time of cards, but again

will reward nothing and

affected will be found to move less

distinct

[illegible]

[illegible] or does not take place in the end of the stage of [illegible], there will be [illegible] transformation, continuing [illegible] spasms, tonic spasms, [illegible] breathing. The [illegible] the expulsion in the [illegible]. Death occurs where [illegible], cavernous voice, [illegible] breathing, and at the [illegible] will cause [illegible] of the health.

Diagnosis — [illegible]

[illegible] without difficulty. [illegible]

[illegible] to distinguish. The [illegible]

[illegible] be confounded with Pneumonia.

[illegible] Congestion and Oedema [illegible]

most [illegible] [illegible], and

second [illegible]. [illegible]

[illegible] the [illegible] [illegible]

[illegible] [illegible] [illegible] the [illegible].

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] both sides at once. In congestion and oedema, there will be only slight dullness on percussion, and on auscultation the bronchial breathing will be [illegible] much less distinct than in [illegible] pneumonia.

[illegible]

[illegible] both sides. It [illegible] [illegible]

[illegible]

pain is more like a sharp stitch, much

[illegible] in pneumonia [illegible]

[illegible] inspiration and expiration. It is in the second or [illegible] stage, that it most difficulty arises, as you have dullness on percussion in both, but in [illegible] effusion there is diminution or loss of vocal fremitus, and resonance. In [illegible] it is usually found) It is not disease [illegible] but [illegible]

Meningitis - In children pneumonia often begins with cerebral symptoms [illegible] with [illegible]. Meningitis begins with [illegible] fever, [illegible] convulsions and other signs will [illegible]

Typhoid Fever - In advanced cases pneumonia may become adv[illegible]

however, not uncommonly occur simultaneously.

[illegible]

should, always be, guarded.

[illegible] of the [illegible]
[illegible] tenacious and sticky character, and
[illegible] continued high temperature
[illegible] a day or two, about the time of
crisis is a sure sign of danger.
[illegible] of exhaustion
[illegible]

Statistics regarding mortality are uncertain. Physicians may be called to cases very late, where no good can be [illegible]. In the Stockholm Hospital, for a series of years, eleven percent of all cases died. [illegible] cases [illegible] twenty four per cent died. It is hardly possible to arrive at any definite conclusion [illegible] the mortality is much less

[illegible] nine-tenths of all deaths after seven days are from pneumonia.

[illegible] — [illegible]

[illegible] no one subject in medicine which has undergone a more thorough change [illegible] spring was employed, and later [illegible] put on calomel and opium, or

[illegible] completely
[illegible] before the mercury was
[illegible] possible [illegible]
recover, but in a majority of cases the
[illegible]

Treatment — [illegible]
[illegible] between the left and right
[illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] with the [illegible]
of the disease, and prevent, by over
[illegible] treatment, [illegible]
[illegible]. [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

called to greater exertion and require

[illegible] strength. [illegible]

[illegible] Hallow-

nervousness, [illegible] pain, [illegible] arise

[illegible]

seen early, in some cases at least,

[illegible]

[illegible]

[illegible] spontaneously. [illegible]

circumstances, as there is danger of killing the patient by paralysis of the heart. In this stage, there are two indications that must be [illegible] of high temperature, and [illegible] the first; the sulphate of quinia in full doses should be used, or if the stomach is irritable the hydrobromate [illegible] the heart a little stimulus may be given. Quinine does not affect the tendency to a critical fall, it [illegible]

not high, it may [illegible]
close as a tonic; it acts as a stimu-
-ent on the heart, and that is point-
[illegible] failure of heart action.
[illegible]
and weakness. To meet [illegible]
[illegible] cases it is absolutely necessa-
-ry, particularly in old patients, and
[illegible]

use of alcohol. In these latter, it is [illegible] led throughout nearly the [illegible] [illegible] [illegible]

[illegible] in old people, as it is not cedalt[illegible]
[illegible] in its [illegible]. If in [illegible] the
[illegible] lapse, [illegible] is apt to [illegible],
[illegible] [illegible] [illegible] [illegible]
[illegible] the [illegible] [illegible]. It is
best to [illegible] the [illegible] [illegible]
region as it then does not interfere
[illegible] [illegible] [illegible]
ends of the [illegible]. [illegible]
[illegible] [illegible] to [illegible] the [illegible] a
[illegible] the spine is [illegible] and then
[illegible] on a flaxseed meal poultice.
[illegible] [illegible] [illegible]
[illegible], [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] of the cantharis.
In the convalescent stage, tonics should
be given, [illegible], [illegible] [illegible] [illegible].

Frank [illegible] admitted into the [illegible] Hospital, [illegible] 22, White, Born in Baltimore, When [illegible] [illegible] with [illegible] [illegible] [illegible]

[illegible] mother while [illegible] high fever, and raging delirium, Dr Dan[illegible] diagnosed typhoid and treated accordingly by bleeding, much against [illegible] families wishes, [illegible] [illegible] terminated [illegible] died on an hour afterwards in [illegible] delirium Dr McLean pronounced it a case of Cerebral Rheumatism. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] sickness, he was taken with violent pain

[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] down-cast [illegible]
tenance.

[illegible] [illegible] [illegible] [illegible] habits very industrious, and punctual at his place of business. The hygienic influence [illegible] [illegible] [illegible]. The home in-
[illegible] would be [illegible] [illegible]
[illegible] hygiene is poor. Very often we would [illegible] [illegible] [illegible] [illegible] [illegible],
[illegible] [illegible] [illegible] [illegible] condition, would it do [illegible] [illegible] a [illegible],
[illegible] [illegible] [illegible] [illegible] [illegible] [

[illegible] fever ran high with chill sensations, and delirium set in. He took no medicine with the exception of a laxative [illegible] he was [illegible] confined, to the patient [illegible] [illegible] and [illegible] [illegible] Pulse [illegible] 192 Pulse 188. Tongue coated and red on borders, He also had some cough, but no pneumonic complication, He was fed on a nourishing diet. Brandy Cream Cordial & Quinine, with milk & [illegible] as liked, which he took quite well. A little [illegible], Cir. second day [illegible] [illegible] [illegible] followed by a second [illegible] [illegible] [illegible]

which were of a yellow color, with a disagreeable odor, quite acid, but not putrid. Also a few ounces of indigestible milk, no diarrhoea made as yet, i.e., up to the time of Spleen was enlarged, dull, no rose spots, no tenderness on pressure over the region. The urine was very yellow and scanty, in a few days it became clear, stimulants were given freely with milk. Quinine was also given in antipyretic doses. Delirium was not marked. Patient had to be tied in bed. Stool seemed a fair specimen of typhoid. Bowels rather free. Pulse seven were saturated. Complicated slightly irritated the patient considerably during his tests. When turned in bed some times cried out as from pain. Some bronchitis

[illegible] Apyretic [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]

Cerebral Rheumatism

The patient was had a [illegible] movement, while he
[illegible] [illegible] left and [illegible], in
[illegible] [illegible] [illegible] [illegible] [illegible],
[illegible] incomplete. The point affected Spleen
& Kidneys normal in [illegible] patch. The
[illegible] & spine were not examined. Pain
[illegible] a [illegible] [illegible] right.

Temp. 1E 103 – m2 102, 2E 101⅔ – 3 104, 102⅗ – 4 102⅘, 103⅔ – 5 102⅘, 101⅗ – 6 99⅔, 10[illegible]
7 100⅔, 102 – 8 99⅘, 102⅘ – 9 100⅗, 101⅗ – 10 101⅔, 102 – 11 103, 102⅔ – 12 101⅗, 101⅘ – 13 101⅓, 101⅗ –
15 100⅘, 102⅗ – 16 101, 101⅗.

Pulse 1E 108 – m2 100, 2E 107 – 3 120, 126 – 4 120, 120 – 5 124, 112 – 6 100, 108 – 7 100, 103 – 8 100, 105 –
9 100, 120 – 10 105, 130 – 11 120, 136 – 12 125, 130, 13 125, 127 – 14 135, 130 – 15 135, 140

Res. 1 32 – 2 27, 36 – 3 38, 32 – 4 26, 30 – 5 34, 27 – 6 26, 33 – 7 24, 26 – 8 22, 30 – 9 28, 28.
10 18, 26 – 11 20, 28 – 12 24, 26 – 13 28, 30 – 14 32, 34 – 15 32, 35.

Freedman Dover, admitted into the hospital
Dec 30th 85, age 22 Born in Baltimore,
with a Sudden [illegible] [illegible]
[illegible] [illegible] [illegible]
and [illegible] [illegible] on Feb 24th at 12 pm
a large dose of Cream Tartar, as he thought
[illegible] [illegible] [illegible] [illegible]
followed with severe vomiting of a green
color, and severe griping with much
pain in stomach, pain relieved with
morphia hyper. at 4 pm there was [illegible]
[illegible] from mouth & bowels. He
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
water and followed in [illegible] immediately
followed by vomiting & purging. He
[illegible] [illegible] stated to have [illegible]
[illegible] from [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] of [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible]

[illegible] of [illegible], iodide
Potassii, Sarsaparilla, + Extract [illegible] were not +
and after [illegible] extended no perceptible im-
provement, after this was persisted in for some
time without any good effects, he was placed
on electricity, the galvanic current, and com-
menced to improve as once could work lim-
gers and raise hand a little. After first
of January could stand and in the 2d
[illegible] to walk in room. At the
patient says, that during his stay at the
Phila hospital he was totally blind for two weeks,
+ at times was the [illegible]. The fo-
cul remained without feeling until near
one in the 30 year, at this time he could
[illegible] a [illegible] by means of [illegible] + [illegible]
[illegible] unaided by [illegible] perceptible [illegible]
[illegible]. He walks on [illegible] and no [illegible]

[illegible]

[illegible] and [illegible] the left side [illegible] [illegible] [illegible]

Leah [illegible] [illegible] [illegible]

drains her from pain, paid no attention to it until the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] malignant growth, it [illegible] a few months [illegible] and seemed entirely well [illegible] [illegible] later it returned [illegible] [illegible] [illegible] [illegible] without pain. She [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] the [illegible] [illegible]
[illegible] [illegible] in appearance with [illegible]
and distinct in [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] slightly retracted, [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

wound was dressed together and closed by sutures & plaster. The wound was dressed with iodoform & iodoform, and patient put to bed. He gave no evidence of weak secretion except depression & weakness. The pulse frequent rapid temp never exceeded 99°. The bowels were moved on fourth day. Two thirds of the wound union healed by first intention. Then was very little discharge. The patient was discharged at the end of the operation thirty days, cured.

Sec was directed to douche with iodoform and bichloride, & did not do so well after the 1st but four months afterwards I saw her and then it was nearly well, excepting small opening in centre. The cicatrix was tender

[illegible] a slight [illegible]. The glands in axilla were not diseased. The general condition was good, and gained several pounds since operation.

Patient was admitted Apl 24th for [illegible] Hospital, was in Accident Ward for the present abode, hypertrophy & [illegible] [illegible] [illegible]

and a [illegible] months previous felt
pain in back and in right side. Right
a. menstruation, has confined to bed nearly all
the time. Applied [illegible] with decided and
continued distention. [illegible]
a normal size in the abdomen. [illegible] but
the second rib under the thoracic [illegible]
enlarged [illegible] and tender in right side. [illegible]
[illegible] border. Tenth rib, the tumor is
sensitive to touch. [illegible] opposite lumbar
fold and tumor, resting upon normal dull
tympanitic in right side, superior line of dull
dullness begins at the inferior border of the
rib and extends just below the umbilicus,
[illegible] right of [illegible]
dullness again is rather circumscribed, fluc-
tuating, [illegible] within two inches
of the breadth of the median border, at which

[illegible]

[illegible] reaches to within a finger breadth of the crest of skin, tender upon pressure, of a slight discoloration at the most prominent point. [illegible] a copious discharge from bowels, in which [illegible] [illegible] [illegible]

[illegible] & [illegible] the [illegible]
[illegible] so little the [illegible]
[illegible] the night [illegible] [illegible] [illegible]
is small bowel temp 99 2/5 P [illegible] R [illegible] 4th
temp 97 P 92 R 20. At [illegible] p.m. [illegible]
[illegible] bowel [illegible] 14 3 pus & pus mixed
with blood, passed more with [illegible]. [illegible]
[illegible] [illegible] [illegible] [illegible] to the
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] very little change in the
pulse & temp At 7.30 P.M. temp 98 2/5 P 110 R 16.
The stool after injection was [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
containing blood & pus in parts. April 26 temp
98 2/5 P 110, R 16, took whisky ℥j & milk ℥j at
intervals during night, no tenesmus & [illegible]
boiled egg & a small piece of beef this morning

[illegible] P. 100 R 19 Evening temp 98⅗ – P 96 R 19, Had frequent stool during the day & passed flatus & [illegible] vertabra [illegible] – April [illegible] to [illegible] Dil No IV Sig [illegible] two hrs C. W. M. Apr 28 Temp 98⅗ P 100 R 2 collap in the evening she left hospital, much against the physicians consent, and died on her way home ~~~

Patrick Dillon entered hospital July 27th age 22 Waiter born in [illegible] Ireland on the counter for past two weeks of good health & temper. He complained of a [illegible] sensation in the abdomen, but [illegible] well fed & well [illegible] Aug 1st [illegible] sick two days with fever. He had [illegible] in the upper part of the abdomen, a temperature and [illegible]

[illegible] constitutional [illegible]
[illegible] not [illegible] [illegible] made his [illegible] [illegible]
sick on the 17th of July, complained of pain in
head & stomach [illegible] [illegible]
[illegible] fever [illegible] a little [illegible] appetite
poor before this time he complained of [illegible]
pain & stupor gradually [illegible]
Came in here one week afterwards with
marked symptoms of typhoid fever flushed
rapid fever, countenance dull, [illegible] [illegible]
[illegible] mentioned tongue furred with inflamed
borders [illegible] [illegible] a yellow color skin
moist [illegible], very little perspiration spleen
slightly enlarged, tenderness over right iliac
~~[illegible]~~ region with a gurgling sound here
spot [illegible] prominent [illegible] more than
[illegible] in no [illegible] Potatoes happened [illegible]
and placed the patient on Quinine, Opium

[illegible]

[illegible] check or total [illegible]

showing that [illegible] and [illegible]

[illegible]

Joseph F. Cordova
Maryland
1886

Malarial. Fever

Nathan R. Smith
Feb 14. 1886

The word "Malaria" is derived from the Italian Mala bad; aria air, being in itself merely a synonim for Marsh miasmata; or infectious effluvia from decayed animal, or vegetable matter. This disease under different names has had its reputation established, as far back, as the earliest periods of medical science. Protagoras describes the drowsiness accompanying a form, called the intermittent. Many others recognized the disease, and now that Medical science has attained such a foothold, and that each year, some new light is thrown upon the Maladies to which is heir; this particular trouble which up to 1640 had no specific treatment, has at last been

recognized, and understood. Not until the drug Cinchona bark was introduced into Spain from Peru, was much attention paid to "Malarial Fever". The reputation of the bark in its own country, for such cases as Malaria; was thought much of, and hence, on its introduction into another part of the world, the study of this disease was stimulated; in part by the conflicting results following the use of the drug, and in part, by the obstinate manner in which the physicians clung to the old theories of Galen. No good results were reached, until Robert Talbor had used the drug in large doses, and until Sydenham conceived the idea, of giving the Cinchona immediately

after the first attack; or during an intermission, for the purpose of forestalling a subsequent attack or rather paroxysm. This fever, comes under the head of the "Periodical", and also, of the "Idiopathic" or essential forms. By a periodical form, a fever or disease is recognized, in that it has the occurrence of febrile paroxysms, or marked exacerbations, in a regular order of succession; thereby demonstrating a law of periodicity. The form called "idiopathic" or "essential" is applied to these fevers, which are not necessarily dependent upon some other disease for their origin; in other words the fever is the primary trouble. In the study of a disease a number of phenomena must be taken into consideration "Aetiology", or the cause of the malady.

whether it be due to some other disease, or to certain abnormal constituents of the atmosphere. In which case, "Prophylaxis", or the prevention of the disease, by removing the cause must be practised. There is hardly any disease which so readily calls into use hygienic measures, as "Malarial fever". The cause of the disease, as its name explains depends upon vegitable decomposition; but it has been observed, that in many localities, where decomposition is taking place all the time no such thing as malarial fever has been known. Hence it has been deduced, that vegetable decomposition must be assisted by certain conditions, such as soil, climate, temperature &c. The principle conditions are as follows 1st Moist, or low localities

remove it: 2nd It is found to be destroyed below a temperature of 60° Fahrenheit, and its active power is increased at 32°: 3rd The place where it is most abundant, and virulent, is near the equator and sea coast: 4th It has an affinity for dense vegetation, which seems to have the power of accumulating it, when lying in the course of winds blowing from Malarious districts, and also forests and even water have the power of obstructing its transmission when these circumstances: 5th It can be carried as far as five miles by atmospheric currents: 6th Its development may take place in fire-throwing, healthy districts, by the turning of the soil, for gas lifes, gas stacks, or for the foundations of houses. 7th Boilers of steam lying in

the coils of cords, which wait the Malaria from the marshy districts seem to have a power of absorbing, and then retaining it. When called upon to pronounce a district free from Malaria, it is an impossible thing to do; experience has taught good much to be the case. Statistics seem to show, that the specific gravity of the bad air keeps it near the ground, and a good many cases are on record, where persons sleeping on the ground floor have been taken with the fever; whereas persons on the second and third stories of the same house, have never been troubled with the disease. It is more abundant, between sunset and sunrise, and therefore can be avoided to a great extent, by preventing exposure to the night, or early morning atmosphere;

This is practised to a great extent, in those countries, where the disease appears in its most active and virulent form. Under the title of "Malarial Fever", four fevers are recognized; having the same cause for their origin, and with a few exceptions, acting in a like manner. The difference being, in the intensity of their attack. Intermittent and Pernicious Intermittent; also Remittent and Pernicious Remittent, are the four, which up to the present time, have been classed under one head, and having for their origin a common cause, called Malaria. "Intermittent Malarial Fever" the first, and milder form of the disease is characterised by a regular order of paroxysms in succession, but with a total absence of febrile movements between the paroxysms.

Fever we see, that the name to a certain extent, explains the malady. A number of names have been given to the disease, such as "Fever and Ague", "The Shakes", "Chill Fever", and many others.
Intermittent Fever is rarely fatal. There are a number of forms, in which Malarial Fever makes its appearance, It may occur in the Quotidian, or every day attack; the Tertian, or the attack appearing every third day; and Quartan the attack very recent- every fourth day. There also may be, any of these forms doubled, or combined. There are no known lesions characteristic of "Intermittent Fever" The Spleen and Liver, may be enlarged and softened, but these changes also occur, in other Pathological conditions. The clinical history embraces, [illegible]

paroxysm, under which head comes the chill, fever, and sweating; second of the intermission, or the time elapsing from the ending of one paroxysm to the beginning of another. In some cases, but not in by and means the majority of them, the attack is preceded by a troublesome pain, or pain in the head, yawning, inclination to exertion, loss of appetite, and general malaise. In persons subject to the trouble, this prodromic stage is often taken as a warning of the approaching attack, and by comfortable treatment is very often aborted entirely. The cold stage, generally ceases in the paroxysm; but in some a state of intense nervousness takes the place of the chill: while others are affected with gastralgia, and

Great irritability indicated by vomiting. The chill however is the most common: a feeling of chilliness about the back and loins, which gradually extends over whole body, is the first symptom. In some it is very decidedly marked, causing the teeth to chatter, and that appearance of the skin known as goose flesh is extremely common. The thermometer, when placed in axilla shows an increase of temperature, but when applied to extremities a marked decrease, owing to internal congestion. The pulse, which is usually accelerated, is small and feeble. The face is pale; sometimes, and indeed not infrequently, both face and roots of hair, present a livid hue. The accompanying symptoms, are a sense of oppression referred to the praecordia, pain in head and limbs

and irritation. This first stage may last from a few moments, to several hours. In infants, for this malady attacks the young as well as quite more advanced in years, convulsions are not an uncommon occurrence in this stage.

The hot stage, might be said to be the opposite of the succeeding, or cold stage. There is an intensity of febrile movement: The skin becomes hot, pulse full and bounding: The face is flushed, and the pain in the head continues, but the pain of the loins, and vascular oppression disappear. The thermometer, indicates a rise of temperature to 104 or 105. This is a constant symptom of the second stage. The intensity of the febrile movement, varies as to degree, and the duration, is from three to

eight hours. The sweating stage follows, and is an indication, that the febrile movement is about to cease. Perspiration appears, first on the face, and soon afterwards over whole body. The febrile movements gradually disappear entirely, and all symptoms seem to abate, and with the febrile movements disappear. The temperature drops to normal, and the patient forgets his sufferings in "peaceful sleep". The third stage, lasts from three to four hours. Urea, Uric acid, and the chlorides, are increased in the urine, during a paroxysm: Albumen may also be present. The intermission, or the time elapsing from the ending of one paroxysm to the beginning of another, serves to give a particular name to the fever

an attack by. That is Quotidian, Tertian, and Quartan, which have been previously mentioned. The intermission is marked in some cases by a total absence of all trouble, while in others, debility, impairment of digestion, and various disturbances are present. The enlargement of the spleen occurs in about 50 % of cases, but its pathological connection with the trouble is hardly understood. It may be readily felt in some persons, and is known as "ague cake". Anaemia is a frequent accompaniment, and is often as a yellow tint over face and body, known as Malarial cachexia. Dropsy, particularly effusion into serous cavities, is often present, but this is not an indication of cardiac or renal trouble. An herpetic eruption often

the Mouth is almost always present.
The length of the disease is indefinite:
it may continue for weeks, and even
merge into months, if curative treatment
is not practised. The patient may
be entirely cured, and all appearance
of the disease may have vanished, but
still a relapse is not uncommon, and
may occur many years after. The poison
seems to lie latent in the system
, and does not in some cases accumulate sufficiently
to again attack for years. A person
who has had one attack, need never be
surprised at having another. There
is a form of intermittent fever
, called "latent" in which the symptoms
are not well defined: the patient
complains of certain troubles, such as
headache, enfeablement of appetite, nausea
and indisposition to exertion. On the

Preparation, the use of antiseptics of the nature of these diseases — so to speak. Material treatment, of course, there is no place for the correction of the diagnosis. Treated intermittent fever, relapse is mentioned few days: the diagnosis is well marked cases present no difficulty. Of course the first thing is to determine, by questioning the patient or friends as to the occurrence of the symptoms, and their duration. The "Lower" and "Mixed" forms may present trouble, but the effect of prompt treatment will soon show us, if we are on the proper track. In Pulmonary or Cerebral form, there is a form of severe paroxysm, resembling intermittent fever, but they occur more frequently in the morning, which is the reverse of intermittent fever.

Of course the consideration, as to whether the person has been exposed, or is subject to malaria, or tuberculosis must be taken into consideration. Persons suffering from abscesses, internal, or external, are apt to have chills, and also those who have undergone a surgical operation: Nevertheless by elimination, we can speedily, get to a proper diagnosis. As to the Prognosis, the intermittent form may be consumed or not at all grave: If the disease from the start be very severe then we call it the Pernicious form, which is nothing more, than the same fever in a greater degree. Of course death may result from simple intermittent fever, but in such cases, another disease will have done so, then in breaking down

the system. Intermittent fever in a number of cases, has been known to break down the health, whence another trouble, would step in, and complete that, which was started, by the former. The great calamity in, letting a poison like Malaria into your system, is that it may appear like a thief in the night, and when you least expect it, the person never being free from the danger of a recurrence. Of so many, of all the list of drugs, compound, or simple, the name of specifics can be applied, for the treatment of a disease; the salts of Quinea, particularly the sulphate, should stand at the head of the list, for their action, on Malarial fever. When the disease is promptly treated.

its arrest may be entirely accomplished. As the time for administering the Quinia, it has been proven after many experiments, that it is best, as the sweating stage is leaving away, or during the intermission. When a person is subject to malarial attacks, and recognizes by the general feeling of discomfort, that one is coming on it may be prevented, or appear only in a very mild form, by the timely administration, of a large dose of Quinia. The majority of authorities, advise a large dose of Cinchona or one of its alkaloids at first, and then a gradual decrease in quantity. The object is held to be produce Cinchonism, as soon as possible. The form of the Sulphate of Quinia which is most efficient, is the [illegible]

it solvency being secured, by a minim of the aromatic sulphuric acid for each grain of the salt. The form of Hills and Louden however are much preferred by patients. If patient is constipated give gentle laxative: When the cold stage is very severe give stimulants, brandy, carbonate of ammonia and hot applications to extremities. The inhalation of a few drops of nitrite of amyl, may also do good. Melsens's solution of morphia, six to eight minims, administered hypodermically, may tend to relieve the nervousness in the cold stage. There are times, when the stomach rejects the drug, as soon as it is taken, such cases are overcome, by the administering of it hypodermically. The best form is the hydrobromate of quinia twenty minims seven

this may be repeated, to avert
pleurisy, even by mouth. When the
attack is about coming on, this
method is also good. When liquid
trouble is apparent, and paralysis
is present, a free drain dose of
Calomel should be given, and followed
up by Senna. In some cases where
the patient on account of some
idiosyncrasy cannot take the
Senna, or where it seems to do
no apparent good; the fluid extract
of Eucalyptus Globulus may be
substituted, in doses of a teaspoonful
with some aromatic water. In some
cases, or of mild day in all cases,
one of the iron preparations or a tonic
should be alternated with the
Senna. In chronic cases of Malarial
poisoning, either Quinine or some

reason does not act well particularly in children, the liquor Potassi Arsenitis in doses from one to six minims, will be found of great value. There are certain cases which present ..... all the symptoms of Intermittent, and which on account of the severity of the attack may die, such cases are classed under the head of Pernicious Intermittent. This trouble may not appear at all grave at first, and both patient and doctor may be unaware of their danger, hence in every case prompt treatment is necessary. In the majority of cases of Pernicious Intermittent fever however the grave character is apparent from first. The symptomatic features differ in various cases: More or less complete coma is present in some; Others are characterized by delirium

preceding the coma; Embarrassment of respiration and great restlessness are marked symptoms. The pulse is small, feeble, and irregular. The danger to be apprehended from another paroxysm, is in proportion to that from which the patient emerges in safety. If the first has been great, the second will likely prove fatal. The prostration in the intermission is in proportion to the severity of the paroxysm. The morbid anatomy of the pernicious form, does not differ from that of the mild form, except except in the intensity of the lesions. In the treatment of this form the physician has two objects in view: The one being to carry the patient safely through one paroxysm, and the other, equally important to prevent another. Cinchona

first of these forms, the treatment differs, according to the symptoms produced. If the heart is weak, give stimulants, Alcoholic, Ethereal and Aromatic: Vomiting, and fainting are to be treated by opiates, given by mouth, or rectum; they are also to be given in delirium, convulsions, and restlessness. Chloroform administered in cold stage, in one half to one teaspoonful, has a very good effect. The second object, the prevention of another paroxysm, should be started before the first one is ended. Cinchona is invaluable here, and should be administered in very large doses. The hypodermic method shines forth in its best light, in treating this type. When the danger of paroxysm is over, the Quinia should be administered in large doses each one of the four preparations

The form known as "Remittent" differs from that of "Intermittent", in that it has remissions, instead of intermissions. Between these two forms, there is a close relationship, the one may be converted into the other. Some of the older authors claim no difference. Remittent and Yellow Fever are associated together, by a good many authorities, under the head of Typho Malaria. The pathological anatomy of Remittent Fever is found principally, in the liver, and spleen. The former being enlarged, and presenting a bronze, or chocolate hue: another name for it being pigment-liver. The blood contains black granules and dark colored cells. The spleen is more or less enlarged, and is also rendered dark by pigmentary deposits. The clinical history of the disease presents usually

a prodromic period, but not in all cases. The prodromes are essentially the same, as those of intermittent fever: the paroxysm is ushered in with a chill, more or less marked. The temperature is actually raised. The appearance of the attack is more frequently before mid day, than after. Fever follows this stage, accompanied with pain in the head, and about back and loins. The febrile movement, may last, from two hours to fourty-eight, if not longer, and then gradually subsides. The pulse fall in frequency, the skin becomes moist, and the patient seems comfortable: Still the febrile movement does not entirely disappear, there being a remission not an intermission. This remission varies, from one to two hours, at the end of that time, another chill

May come on. There may be only one remission, or many occurring in regular succession, and they may correspond, to the Quotidian, Tertian or Quartan forms singly, or collectively. The febrile career ends during the second, or third week. Early in the fever nausea, and vomiting may occur, and tenderness over the epigastric region, is not uncommon. The urine is scanty, and high colored; and the specific gravity is increased. Jaundice is a very common symptom. Remittent, like Intermittent, is due to a special poison, known as Malaria. The diagnosis between simple Remittent and Intermittent is readily made, by observing if there be remission, or intermission and Remittent generally becomes continuous

Remittent may be distinguished from Typhoid, by the absence of eruption, by the characteristic rise and fall in temperature, so common in Typhoid, and by the absence of tenderness of the iliac region, also having no intestinal hemorrhage. Remittent fever as it is having the spleen, may merge into Intermittent. The prognosis of simple Remittent as a general rule, is favorable: Nevertheless the disease leaves the spleen, prone to another attack, and also generally leaves behind, a souvenir, in the form of chronic enlarged spleen or general dropsy. The severity of the disease depends as regards time of year, climate &c; being more severe in tropical countries. The treatment of the disease, is directed first towards the symptoms

and then to relieving such symptoms, as nausea, headache, vomiting &c. Cinchona and its alkaloids are the best to be employed, given at first in 15 to 20 grain doses, and then in smaller doses. If the patient cannot take it, or reject it from stomach, give hypodermically, or per enema. The treatment is essentially the same as in Intermittent Fever. Remittent Fever is a parallel of the Pernicious Intermittent form, and the same objects are aimed at. This is more severe however than the latter, and its danger must readily be measured, inversely to its brevity. The treatment is the same as in the intermittent variety. A number of names have been given to it such as Typhoid Fever, "Jungle Fever" Hungarian Fever and many others